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The Somme, July 1st, 1916

The Battlefield

Somme — French department formed from part of Picardy; prefecture: Amiens; sub-prefectures: Abbeville, Montdidier, Péronne; 4 arrondissements, 41 cantons, 835 communes; court of appeal and episcopal seat at Amiens; the department takes its name from the river which waters it.

'Lethargically,' one feels like adding. For the Somme is a slow-moving river, winding its weed-choked way through a peat-bottomed valley below beech woods and bare chalk downland. The countryside, too, is slow-moving, under the gaze of the traveller who takes one of the long Roman roads which radiate north-east, east and south-east from Amiens. Low plateaux and ridges, separated by the shallow valleys of the Somme's tributaries, the Aire, Ancre, Noye, Avre, Buce, succeed each other monotonously, devoid of hedges and almost of woodland, thickly populated, intensely cultivated. Between the Noye and the Somme itself, in the plain of Santerre, the land is completely flat and yields the most characteristic of the department's crops, sugar beet, dull to contemplate, heavy to work, rich to harvest. In September the roads of the Santerre are slippery with mud ('*Attention! — Betteraves*') when the clay-smeared beet are hauled to the little refineries whose tall, single chimneys mark the villages of the plain; in October the refinery-owners summon their neighbours to shoot partridge and hare among the furrows and sit down in the evening a hundred strong to eat the bag; in November enormous ploughs emerge from the machinery sheds to be dragged on cables between stationary

traction engines across the mile-wide fields. The pace of life on the Somme is as slow as its rivers, as regular as its natural features.

But as ploughing proceeds, little dumps of foreign objects appear along the verges of the roads. Rusty, misshapen, dirt-encrusted, these cones and globes reveal themselves, at a closer look, to be the fruit not of agriculture but of war; trench mortar bombs, howitzer shells, aerial torpedoes — eight-inch, seventy-fives, seventy-sevens, eighteen-pounders, 210mm, Jack Johnsons, coalboxes, whizz-bangs — veterans identify them in the language of sixty years ago with unhesitant certitude, though they approach the dumps with respectful caution. At the end of the ploughing season, bomb disposal officers of the French army arrive to remove the relics to a spot where they can be safely detonated. Occasionally an officer is killed. Even after sixty years, the fuses of these 'duds' and 'blinds' remain activated, the charges they contain explosive.

Bomb-disposal officers are killed also in Belgium, along the banks of the Yser and on the low crescent of heights which ring Ypres to the east; and, on French soil, south of the Somme, in the vineyards of Champagne and in the wheatlands of Lorraine. But the dumps which accumulate on the Somme differ in two respects from those with which bomb-disposal officers have to deal elsewhere. First, the heaps are bigger. The Somme was not the most heavily shelled of the Western Front battlefields. In terms of shells per square yard, that cachet belongs to Verdun; in duration of shelling it belongs to the heights of the Aisne and the Chemin des Dames; in remorselessness it belongs to the Ypres salient. But for a variety of reasons, dud shells do not resurface in anything like the same numbers on other battlefields as they do on the Somme. Around Verdun and in the Argonne, another heavily shelled sector, little of the ground is worked; as on the slopes of the Vosges, it was covered with forest before the war and has been replanted since. In the Champagne, historically the principal training ground of the French army, large areas have always been used for artillery practice, and the duds of the First World War, merely adding to the existing hazards, attract little attention. The high chalklands of Artois, up whose slopes the French, and later the British and Canadians, struggled towards the crests of Vimy and Notre Dame de Lorette, are now back again under pasture; while in Flanders, the glutinous

soil swallows the jetsam, as it has swallowed the concrete pill-boxes with which Hindenburg sought to fence the British and Belgians into the Ypres salient and the water-logged valleys of the Lys and Yser. It is the Somme, therefore, with its busy agriculture and light, friable soil, which most plentifully throws up the dangerous debris of the great offensives.

Most of this debris is British – and this is the second respect in which the Somme dumps differ from those accumulated north or southwards. For the Somme was, in a way true of no other battlefield of the First World War, British territory. Ypres, of course, became during the war almost the corner of a native field; and, with its British church, English-speaking pubs ('Bass on draft'), English school for the children of the Commonwealth War Graves' gardeners and plethora of county regimental memorials, remains so. But it was always a tiny battlefield into which Haig, even at the height of his offensive obsessions, found it difficult to squeeze more than half a dozen divisions for an attack. The British, moreover, won no victories at Ypres, except that curious victory of the spirit which, over half a century later, still plucks back the survivors of the Salient to stand in silence beneath the tomblike arches of the Menin Gate and hear the evening Last Post blown, or sit under the willows in the Ramparts cemetery, where lawns grow over the roof of the Lille Gate dressing-station and bodies carried from it lie ranked beneath the turf. The Somme, by contrast, offered an immensely long front of attack on which twenty divisions could assault side by side. And, for all the miseries suffered there, it was also a front which brought its triumphs. On it the British drove the first tanks into action, in the ruined village of Flers, on September 15th, 1916. Two years later, they organized before Amiens the first great armoured breakthrough of modern warfare. And earlier in the year of 1918 they had, after the terrifying and almost total collapse of one of their armies, brought to a halt near the city the greatest of Hindenburg's 'war-winning' offensives. It was these battles, together with the long periods of garrison duty intervening between them, which made the Somme a British, rather than a French, Belgian or American sector. The Americans would eventually come to think of the Argonne, that awful wilderness of shredded woods and choked-up streams, as 'their' battleground, as did the Belgians the Yser,

on which they were to wage a semi-aquatic war for nearly four years. The French, who had poured out their blood along each mile of the five hundred between Nieuport and Switzerland, considered half a dozen points on the Western Front as *champs d'honneur* particularly their own – Verdun, of course, but also the Chemin des Dames (it was for the vistas of the Aisne it offered that Louis XV had had built for his daughters the road which gave the ridge its name), Tahure and the Main de Massiges in Champagne, Les Eparges in the St Mihiel salient (later also the scene of an American offensive) and Sainte Marie aux Mines and the Hartmannswillerkopf (*le vieil Armand*) in the high Vosges, over which *Chasseurs alpins* and *Jäger* squandered their special mountain-warfare skills during 1915. Mort-Homme, Côte 304, Neuville St-Vaast, Somme-Puy, Malmaison, Moulin de Laffaux – it was the struggles for such unregarded corners of the homeland as these which made them 'French' in a way they had not been before. In the same way it was the battles of 1916 and 1918 – Bazentin, Pozières, Morval, Thiepval, Transloy, Villers Bretonneux – which made the Somme 'British'. But none more so than the first battle, the Battle of Albert, and its first day, July 1st, 1916.

The Somme, in 1916, was new territory for much of the British army. In mid-1915 a small sector north of the river had been taken over by the embryo Third Army, as part of the Allies' agreed policy of reducing the length of front held by the French, but the bulk of the British Expeditionary Force had remained in Flanders. As its size increased, it had extended its front southwards, but only far enough to cross the wet levels of the River Lys into the dreary coalfields east of Lille, where during 1915 it fought a series of minor, murderous trench-to-trench battles – Neuve Chapelle, Aubers Ridge, Festubert, Givenchy – and mounted one major, miscarried offensive at Loos. All had been characterized by the extreme ferocity of the fighting and the miserable physical conditions which the terrain imposed. Between Ypres and Armentières, water is found everywhere close beneath the surface and much of the line had to be constructed of sandbag barricades instead of trenches. Almost everywhere, too, the Germans occupied what commanding heights there were: near Ypres, the Paschendaele and Messines ridges; in the coalfields, most of the slag-heaps and, until they

were destroyed, the pithead towers. Compelled to struggle for possession of the higher, drier ground, the British had driven their lines in many places almost to within conversational distance of the Germans'; at Spanbroekmoelen, south of Ypres, the trenches were separated by a single fence of 'international' wire, which each garrison mended from opposite sides under cover of darkness. But despite the heavy and continuous toll of losses—about 300 a day—which this physical intimacy and constant attack cost the British, Flanders had become a sort of home for the B.E.F. Behind the lines—and battalions left the trenches at regular and quite frequent intervals for 'rest'—the villages provided roofs, straw, beer, *pommes frites*, fields for football. As peasants learnt to profiteer, the army and churches erected canteen huts, where the beer was both cheaper and stronger, and tea, something the locals never got the hang of brewing, was on tap. Farther back, in the little Flemish market towns, Poperinghe—'Pop', Bailleul, Béthune, cafés and restaurants thrived, collecting clienteles of young officers who would ride over in groups to celebrate a spell out of the line on comfortable chairs at well-laid tables. Other little calling places had begun to make a name: clubs where concert-parties, over from England or got up by divisions, performed; spiritual ports of call, like the famous Talbot House (Toc H, in the war's phonetics) in Poperinghe where all visitors shed their rank; profane addresses which officers entered furtively or not at all. The geography of West Flanders, Nord and Pas de Calais, had thus, by the end of 1915, become extremely familiar to the B.E.F. Its network of roads, turnings, crossings (already much engineered and improved), was imprinted on the army's mental map, and its place-names had been Tommified over a large area, not only those of the larger spots whose soldier-equivalents were well-known at home—Armenteurs, Wipers (Ypres), Vlam (Vlamertinghe), Eetaps (Etaples)—but of many quite tiny features of purely local tactical importance. The Tommy's names for a few of them had a wide currency—Plugstreet (Ploegsteert) Wood and Whitesheet (Wytchaete)—but most formed a private code: Tram Car Cottage, Battersea Farm, Glencorse Wood, Beggar's Rest, Apple Villa, White Horse Cellars, Kansas Cross, Doll's House. The origin of most of the names, bestowed during the B.E.F.'s moment of epic in October and November, 1914, had

already been forgotten by the following summer. By the end of 1917, the places which they signified would themselves have been obliterated. But the names would still pass from mouth to mouth as new battalions relieved old among the slag-heaps, along the stream-bottoms, in the vanished woods.

The Somme, therefore, was country to be mistrusted by the divisions which came south to it in March 1916. These short sectors which had been held since the previous summer by the Third Army looked familiar to the new Fourth: the trenches were properly house-kept and laid out as per regulation, with continuous belts of wire in front, a parapet and a parados, traverses—those regular kinks in the line which prevented an attacker gaining possession of one stretch from shooting down its whole length, and a support and a reserve line at the proper distance—the one, two hundred yards back; the other, four hundred back again—connected to the front by communication trenches. Thus accommodated, the brigades of the Fourth Army could look forward to organizing a proper trench routine, rotating each of their four battalions between front, reserve and rest on a sixteen-day cycle. But the divisions of the Third, which, by a sideways move, inherited a sector vacated by the French, were at a loss. Their predecessors, by all the evidence, had not been conducting trench warfare at all, not at least as its rules were understood in the B.E.F. Flowers had been allowed to overgrow the parapets of the trenches—the 1/4th Ox and Bucks took over a 'Marguerite Trench' from the French—which in many places were not truly continuous, but organized as independent 'positions', comfortable to occupy, at least for a small garrison, with their little scrapes in the trench walls and wattle-shelters in the corners of the traverses, but ill-adapted for raiding or for solid battalion defence.

And the truth indeed was that the French had not been waging trench warfare on the Somme. For them, it was an 'inactive' sector which they were content to hold with the minimum of infantrymen in the front line, using their plentiful corps and divisional artilleries of seventy-five millimetre guns to warn off the Germans should they menace an attack. But the Germans opposite had never put them to the trouble. For their high command also was content to regard the Somme as a quiet sector, leaving it in the hands of reserve divisions which might

be allowed an easy life as long as they improved their front – by digging and wiring – and kept the French on the right side of no-man's-land. Some of the German divisions on the Somme had, in consequence, been there since September 1914 with the loss of scarcely a man, except among the contingents which they were occasionally obliged to detach when the Allies attacked in Flanders or Champagne.

The Plan

All this was about to be changed. Since December 1915, the French and British had been planning a great offensive on the Western Front and the sector they had chosen for it was that 'athwart the Somme'. This was not to be the first offensive seen in the west. Indeed the S-like trace of the Western Front was itself the product of a series of offensives in 1914. The earliest, mounted by the French into Lorraine, had fixed the lower loop of the S along the line of the Vosges and the River Meurthe; the second, mounted by the Germans in conformity with the dead maestro Schlieffen's plan, and hinging on Verdun, had planted the centre of the S on the Aisne – though it had hovered for a week on the Marne; the third, a running battle between French and Germans, known as the Race to the Sea and fought up the rungs of the parallel main railway lines of north-eastern France, across the departments of the Oise, Somme, Pas de Calais and Nord, had ultimately planted the upper loop of the S on the River Yser. There, in October and November, in the only gap of open front remaining in the west, the French, British, Belgians and Germans had worried the last gasps of life out of their hopes of quick victory. Henceforth, if they were to seek a decision, it would be found on the far side of the trench line.

But much of the terrain which the trench line crossed was unsuitable for decisive operations. North of Ypres, both sides were prisoners of the floods; south of Verdun the proximity of rivers, forests or mountains threatened a rapid check to any advance, even if it could be initiated; between the Oise and the Aisne, in the dead centre, steep river valleys likewise offered little prospect of breakthrough; and there were a number of

other unpromising stretches – the valley of the Lys, south of Ypres, and the forest of the Argonne, west of Verdun. The narrowness of suitable attacking front left after these sectors had been subtracted from the whole mattered little to the Germans, for they, once fully persuaded of the failure of the 'war-winning' Schlieffen plan, were content to stand on the defensive in the west while they won victories over the Russians. But it mattered a great deal to the French, whose national honour was in pawn to the Germans, together with much of their national wealth; and to the British, who, as the numbers in their armies grew, needed a battlefield on which to make their strength – and their commitment to the common cause – felt.

By any sensible strategic reckoning, there were only three sectors where the lie of the land and the direction of the railways so ran as to favour an Allied attack; the Somme, Artois and the Champagne. During 1915 it was upon the last two that they concentrated their forces. Both offered high, dry, chalky going and a hinterland across which an advance might be carried at speed if the trench line could be broken. But it was less the nature of the terrain than their relationship to each other which recommended these battlefields to French high command. Grasping still after the decisive battle of which he had been cheated in 1914, Joffre insisted on seeing the Western Front as a 'theatre of operations' rather than the fortified position which it truly was, and its central section therefore as 'major salient'. In that the front between Verdun and Ypres ran in a rough semi-circle, forming the upper loop of the whole S, a salient it was, with its northern root in Artois and its southern in Champagne. It was an illusion, however, soon to be demonstrated as such, that an attack on the major salient was the right strategy or that the conventional method of dealing with a salient – by simultaneous attacks at the roots – would work in the circumstances of 1915. There were many reasons why not. Some were to be glimpsed in the French spring offensive of 1915, known as the Second Battle of Artois, which failed to capture Vimy Ridge. More were to be revealed, and more fully, in the September battle, a truly joint offensive between the French, attacking in Champagne, and a pair of British and French armies, which attacked side by side in Artois; the French again failed to carry the Vimy position, the British just got possession of the

village of Loos (having hoped to create the conditions for a cavalry breakthrough), while the major French offensive in Champagne – the last in which they assaulted behind colours and bands – dissipated itself in blood and misery on the slopes of Tahure and the Main de Massiges.

Allied strategy for 1916 required, therefore, a new offensive plan. Joffre decided, moreover, that it needed a new front. This was due in part to his growing recognition that a front which had been attacked was so 'thickened up' in the process – cauterized and criss-crossed with a scar-tissue of new and old trenches – that a renewal of the assault on the same spot carried a diminishing prospect of success; but in greater part to his desire to involve the British in a major offensive effort in 1916. In suspecting their disinclination to be involved, he did them an injustice; in supposing that their choice of location for an offensive might not serve his Grand Strategy, he was on to something. Haig, who had made his reputation by his defence of Ypres in late 1914, had, as soon as he assumed command of the B.E.F. in December 1915, set his staff to plan for the next great British offensive to take place there again. In selecting the Somme front, which was where the French and British sectors touched, as the focus of Allied efforts for 1916, Joffre was at least to ensure that those efforts would be jointly directed towards the defeat of the German army on French soil and under his hand – even if the method by which it would be defeated was, as he was coming privately to accept, that of *usure* – attrition – rather than the breakthrough in which the British still hoped and believed.

Attrition is a game at which two can play. Both the British and French had too long and easily taken for granted that the German posture on the Western Front was a defensive one. It was almost as great a psychological as physical shock, therefore, when in mid-February 1916 the Germans opened a major and quite unexpected offensive at Verdun, the lower hinge of the Western Front. From the outset the French rightly grasped that its object was to impose upon them the necessity either of making a humiliating withdrawal or of bearing a prolonged butchery. The French settled for butchery; but from the date of the offensive's outbreak, their discussions with the British lost their academic, almost reflective pace and took an urgency

which became more and more desperate as the numbers of French lives lost at Verdun grew. Death or wounds had taken 90,000 Frenchmen by the end of March, only six weeks after the offensive had begun. In May, when Joffre came to visit Haig in his headquarters, it was calculated that losses would have risen to 200,000 by the end of that month. Haig conceded the need to fix an early date of the opening of the Somme offensive; he indicated the period from July 1 to August 15. At the mention of the later date, Joffre, extremely agitated, burst out that 'the French army would cease to exist' if nothing had been done by that date. On the spot, the two generals settled for July 1. The British would attack with a dozen divisions north of the river, the French with twenty to the south.

The Preparations

Haig's planners now busied themselves with fixing the final details. Throughout the earlier part of the year, they had been creating behind the Somme front the infrastructure of roads, railway spurs, camps, hospitals, water-pumping stations, supply dumps and transport parks without which a deliberate offensive could not be mounted in an industrial age. The most important end-product of this labour was the accumulation of artillery ammunition, of which 2,960,000 rounds had been dumped forward. (By way of comparison, Napoleon probably had about 20,000 rounds with his guns at Waterloo.) Consequently, the most important element of the attack plan was the artillery programme. It was divided into two. The first instalment was to be a week-long bombardment of the German line, concentrating on the trenches occupied by the garrison but also reaching back to 'interdict' – deny the use of – the approach routes to those trenches, where those routes could be reached. The second instalment was to be the barrage. This word, the meaning of which has since been smothered in English by the weight of historical allusion attaching to it, was new to the British in 1916. Borrowed from the French, who use it to signify both a turnpike barrier and a dam (whence it has been taken into English by another route), it literally has the force of meaning

'preventing movement'. And such was the desired function of the *tir de barrage*; 'barrage fire' was a curtain of exploding shells which preceded the advance of the infantry, preventing the enemy infantry from moving from their positions of shelter to their positions of defence until it was too late to oppose the attackers' advance. In strict artillery theory, the barrage, by carefully timed 'lifts', could take the body of infantry it was protecting clean through an enemy position without their suffering a single loss from enemy infantry fire.

The only *theoretical* limit on the protection the barrage could offer was imposed by the range of the guns firing it – which meant that beyond about six thousand yards from the gun-line, say five thousand from the front trench, the infantry could not count on the artillery's fire reaching ground they wished to traverse. In practice 'effective' ranges were regarded as rather shorter – 'effective' having changed its meaning since Waterloo. There, as we saw, it meant 'making an effect on the enemy', something shot would not do at long range because it quickly lost its killing velocity and accuracy. By 1916, when better technology had improved velocity and accuracy ten-fold, and the bursting charge had made shells lethal even at extreme range, 'effective' fire really meant 'observable' fire, fire which fell within sight of an observation officer who could communicate with his battery and correct its guns' deflection and elevation. He was expected to keep close behind the attacking infantry – he was also expected to be able to keep his telephone cable to his battery intact, a much more doubtful expectation – and the limit on the effectiveness of fire, therefore, was that imposed by his ability accurately to spot the fall of shot. If we estimate his effective range of vision at a thousand yards, and his distance from the leading infantry also at a thousand, we arrive at an 'effective' range for the barrage of about four thousand yards from the front trench.

This was almost exactly the maximum distance set for the advance of each of the infantry formations on July 1st, which is not surprising, for 'objectives' were arrived at by exactly these mathematics. On some divisional fronts, final objectives were closer to the British front line if the German front position was closer. On less than half the front, however, did objectives fall on the German second position, the siting of which the Germans

had, of course, determined by the same calculations of artillery ranges which underlay the planning of the British attack. The British infantry were, therefore, being asked to commit themselves to an offensive of which the outcome, even if completely successful, would leave the Germans still largely in possession of a second and completely independent system of fortification untouched by the attack. Its capture would require the hauling forward of all the impedimenta of bombardment and the repetition of the opening assault on another day, at another hour. That they were not daunted by this prospect is explained in part by the briefing that the staff had given to the regimental officers, and the officers to their men: that the real work of destruction, both of the enemy's defences and men, would have been done by the artillery before zero hour; that the enemy's wire would have been scythed flat, his batteries battered into silence and his trench-garrisons entombed in their dug-outs; that the main task of the infantry would be merely to walk forward to the objectives which the officers had marked on their maps, moderating their pace to that of the barrage moving ahead of them; finally, that once arrived there, they had only to install themselves in the German reserve trenches to be in perfect safety. Had anyone yet coined the phrase, 'Artillery conquers, infantry occupies' it would have been on everyone's lips. Or would it? For the better explanation of the army's optimism was that it was a trusting army. It believed in the reassurances proffered by the staff who, to be fair, believed them also. It believed in the superiority of its own equipment over the Germans'. It believed in the dedication and fearlessness of its battalion officers – and was right so to believe. But it believed above all in itself.

The Army

The British Expeditionary Force of 1916 was one of the most remarkable and admirable military formations ever to have taken the field, and the Fourth and Third Armies, which were to attack the Somme, provided a perfect cross-section of the sort of units which composed it. Four of the thirteen attacking divisions were regular, were wholly or largely formed, that is, of

long-service volunteer soldiers. The 4th Division demonstrated what type of formation this was. All its twelve battalions of fighting infantry were old-sweat units, two Irish, one Scottish, five Midland or North Country, two West Country, one East Anglian, one London; and, despite continuous action since the Battle of Mons in August 1914, many of their experienced pre-war officers and N.C.O.s still survived. The 7th and 8th Divisions were less completely regular, containing as each did a war-raised 'Kitchener' brigade (three brigades of four battalions made a division) but were distinctively regular in spirit. This was true, too, of the 29th Division, which contained two war-raised units – the so-called Public Schools Battalion and the Newfoundland Regiment – but was composed otherwise of the toughest old-sweat battalions, those which had been overseas on imperial garrison duty in August 1914. Three of the 'Kitchener' divisions also contained regular battalions, the 21st, 30th and 32nd, having one in each of its brigades; the rest of their infantry, like all that in the 18th, 31st, 34th and 36th Divisions, was 'Kitchener' or 'New Army'. What made these battalions – 97 out of the 143 destined for the attack – so worthy of note?

First, that they were formed of volunteers. The regular battalions were also raised by voluntary enlistment, but the impulsion which drove a pre-war civilian to join up for 'seven and five' – seven years with the colours, five on the reserve – was most often that of simple poverty. 'I would rather bury you than see you in a red coat' were the words his mother wrote to William Robertson, a ranker who became a field-marshal, on hearing of his enlistment, and they tell us all we need to know about what a respectable Victorian working-class family felt at a son joining the army. Almost any other sort of employment was thought preferable, for soldiering meant exile, low company, drunkenness or its danger, the surrender of all chance of marriage – the removal, in short, of every gentle or improving influence upon which the Victorian poor had been taught to set such store. It is against this background that we must review the extraordinary enthusiasm to enlist which seized the male population of the British Isles in the autumn of 1914 and provided the army, in a little under six months, with nearly two million volunteer soldiers.

Among the first hundred thousand – for administrative convenience, the volunteers were called for in batches of that number – many who joined up were without work, there being, for example, a serious slump in the building trade in the summer of 1914. Some might, therefore, have been eventually impelled into the army, while others perhaps used the pretext of a national emergency to camouflage a personal one and to justify the breaking of a taboo. But, from the outset, many surrendered well-paid, steady employment to join up, coming forward in such numbers that they overwhelmed the capacity of the army to clothe, arm and train them. Kitchener, hastily appointed Secretary of State for War, had originally called for a single increment of a hundred thousand men to the strength of the regular army. He was, by the spring of 1915, to find himself with six of these 'hundred thousands', from which he formed five 'New Armies', each of six divisions. The two original 'hundred thousands' provided two series of six symmetrical divisions, reflecting and to a large extent corresponding with the regional division of the country: 9th and 15th were called Scottish, 10th and 16th Irish, 11th and 17th Northern, 12th and 18th Eastern, 13th and 19th Western and 14th and 20th Light (formed from Londoners and other southerners into battalions of the rifle and light infantry regiments). But the sheer weight of the recruiting flood soon washed away the very flimsy framework of organization within which the War Office tried to contain it. The facts of demography, too, worked against their scheme, for the population of the British Isles did not neatly divide into six. The great reserves of manpower were in the northern and midland cities and in London, and it was this pattern which began to tell in the third, fourth and subsequent 'hundred thousands'. The men who had come forward in these waves chose their own titles for their units, in some cases their own officers, in almost every case their own comrades. These were the men who formed the 'Pals' Battalions'.

Perhaps no story of the First World War is as poignant as that of the Pals. It is a story of a spontaneous and genuinely popular mass movement which has no counterpart in the modern, English-speaking world and perhaps could have none outside its own time and place: a time of intense, almost mystical patriotism, and of the inarticulate elitism of an

imperial power's working class; a place of vigorous and buoyant urban life, rich in differences and in a sense of belonging – to work-places, to factories, to unions, to churches, chapels, charitable organizations, benefit clubs, Boy Scouts, Boys' Brigades, Sunday Schools, cricket, football, rugby, skittle clubs, old boys' societies, city offices, municipal departments, craft guilds – to any one of those hundreds of bodies from which the Edwardian Briton drew his security and sense of identity. This network of associations offered an emotional leverage on British male responses which the committees of 'raisers', middle-aged, and self-appointed in the first flush of enthusiasm for the war, were quick to manipulate, without perhaps realizing its power. First among these men was the Earl of Derby who, in his role as caudillo of the commercial north-east, called in late August 1914 on the young men of Liverpool's business offices to raise a battalion for the New Army, promising that he had Kitchener's guarantee that those who 'joined together should serve together'. The numbers for the battalion were found at the first recruiting rally, and the overflow provided two others. The clerks of the White Star shipping company formed up as one platoon, those of Cunard as another, the Cotton Exchange staff, banks, insurance companies, warehouses contributing other contingents, so that between Friday, August 28th and Tuesday, September 3rd a whole brigade of four infantry battalions – four thousand young men – had been found. They called themselves the 1st, 2nd, 3rd and 4th City of Liverpool Battalions; later the War Office would allot them the more official title of 17th, 18th, 19th and 20th Battalions, King's (Liverpool) Regiment, thus accommodating them within the conventional regimental structure of the peace-time army, and designate them the 89th Brigade of the 30th Division. But they would continue to think of themselves as the Liverpool Pals.

And the Pals idea at once caught hold of the imagination of communities much smaller, less self-confident, less commercially dominant than Liverpool. Accrington, the little East Lancashire cotton town, and Grimsby, the North Sea fishing port, shortly produced their Pals, Llandudno and Blaenaw Festiniog, the Welsh holiday resorts another, the London slum boroughs of Shoreditch, Islington, West Ham and Bermondsey theirs. Artillery brigades were raised in Camberwell, Wearside, Burn-

ley, Lee Green, Lytham St Anne's; Royal Engineer field companies in Tottenham, Cambridge, Barnsley, Ripon, and units arose with sub-titles like North-east Railway, 1st Football, Church Lads, 1st Public Works, Empire, Arts and Crafts, Forest of Dean Pioneers, Bankers, British Empire League, Miners. Miners, who numbered 1.2 million in 1914, about six per cent of the employed population, and whose places of work were concentrated almost exclusively in the West Midlands, South Wales, the North-East and the Scottish Lowlands, provided a disproportionately large number of the recruits and of the units they would eventually form. So many were physically stunted that at first they failed the army's height requirement; but being otherwise robust were later formed into special 'Bantam' units, for which the height requirement was reduced to between 5' and 5' 3". The spectacle of these uniformed midgets in training touched the lowest strain of sentimentality in Hun-hating journalists, while many of the recruits, sharing nothing with the miners but their lack of stature, turned out poor fighting material and their units with them. But these were the exception. In physique, in subordination, in motivation, in readiness for self-sacrifice, the soldiers of the Kitchener armies, 'citizen soldiers' as the propaganda of the period, for once getting its categories right, called them, were unsurpassed, and were matched in quality only by the magnificent volunteer contingents provided by the white Dominions, and by the Ersatz Corps of German university and high-school students who had paid the price of going untrained to war in the *Kindermord** at Ypres in October and November 1914.

The *Kindermord*, had the Kitchener soldiers grasped its import, offered them an awful warning, for the Ersatz Corps, which outnumbered the tiny B.E.F. of 1914, had been beaten by the superior military technique of war-hardened soldiers. The Kitchener battalions had on formation, and for many months afterwards, no knowledge of military technique whatsoever. Indeed 'battalions', which implies an irreducible minimum of military organization, is a misnomer. Some 'battalions' entered into military existence when a train load of a thousand volunteers was tipped out on to a rural railway platform in front of a single officer who had been designated to command it. Few

* *Kindermord* – 'Massacre of the Innocents'.

of these battalions, beyond those of the first two 'hundred thousands', were allotted more than three officers and three regular N.C.O.s, and those were often second-raters—retired Indian cavalrymen, militia colonels, disabled pensioners. Occasionally the choice was more promising (though 'choice' of course was sharply limited by the need to keep every fit and able officer in France) and the more intelligent of these instant commanding officers would send the men off in small groups for a few minutes to elect their own junior leaders, or would call for those with some experience of supervising others to accept probationary rank. Egalitarian though the mood of the Kitchener armies very distinctively was, appeals of this sort generally produced candidates, often ones whose authority was readily accepted by their fellows and could eventually be confirmed.

But although this method yielded N.C.O.s, it did not do much to officer the new armies. The War Office was unwilling to grant commissions unless aspirants could prove their suitability, and although it devolved the power to adjudicate on to the local 'raisers', it and they shared common criteria of what 'suitable' meant. Officers had to be gentlemen. But just as the distribution of manpower failed to mesh with the regimental organization of the British army, so too did the social with the human geography of the country. Britain in 1914 was as sharply Two Nations as it had been seventy years before, so that throughout the industrial North, the West Midlands, South Wales and Lowland Scotland existed populous and productive communities almost wholly without a professional stratum and so without an officer class. Young men with the necessary qualifications—possession of the Certificate A or B granted by an Officer Training Corps was usually stipulated, though education at one of the public or better grammar schools which ran an O.T.C. was in practice often found sufficient*—were concentrated in the

* R. C. Sherriff, author of *Journey's End*, describes his first attempt to become an officer in August 1914: "School?" inquired the adjutant. I told him and his face fell. He took up a printed list and searched through it. "I'm sorry," he said, "but I'm afraid it isn't a public school." I was mystified. I told him that my school, though small, was a very old and good one—founded, I said, by Queen Elizabeth in 1567. The adjutant was not impressed. He had lost all interest in me. "I'm sorry," he repeated. "But

south and west and in half a dozen major cities. Thus there came about, during the first two years of the First World War, one of the most curious social confrontations in British history and, in its long-term political implications, one of the most significant. It was almost always a meeting of strangers. It was sometimes a meeting of near foreigners. John Masters, in his description of his joining the 4th Gurkha Rifles of the old British Indian Army in the nineteen-thirties, has marvellously evoked the mutual incomprehension, good-humoured but absolute, which took hold of a platoon and its new officer, fresh from England, when first they met. Something very similar fell upon the Kitchener armies in the winter of 1914 when nicely raised young men from West Country vicarages or South Coast watering-places came face to face with forty Durham miners, Yorkshire furnacemen, Clydeside riveters, and the two sides found that they could scarcely understand each other's speech. It was only the ardent desire on the one hand to teach, to encourage, to be accepted, on the other to learn and to be led which made intercourse between them possible. In this process of discovery, both of each other and of the military life, many of the amateur officers were to conceive an affection and concern for the disadvantaged which would eventually fuel that transformation of middle-class attitudes to the poor which has been the most important social trend in twentieth-century Britain.* Many of the Kitchener Tommies were to perceive in their officers' display of fellow-feeling an authenticity which would make attendance on that transformation tolerable. But by what strange communion did these feelings transmit themselves! Siegfried Sassoon has described how his own life was

our instructions are that all applicants for commissions must be selected from the recognized public schools and yours is not among them." And that was that. It was a long, hard pull before I was at last accepted as an officer. Only then because the prodigious loss of officers in France had forced the authorities to lower their sights and accept young men outside the exclusive circle!

* 'What a lesson it is to read the thoughts of men, often as refined and sensitive as we have been made by the advantages of birth and education, yet living under conditions much harder and more disgusting than my own.' Letter of 2/Lt. Stephen Howett, Warwickshire Regiment (Downside and Balliol College, Oxford), written after censoring his own soldiers' letters home.

changed by the expression of total trust and self-surrender visible in the faces of his men, looking up at him as they squatted cross-legged, while he inspected their feet after a route march.

Inspecting sore feet was one of those rituals of the regular army into which the Kitchener officers were earliest initiated, partly because its dotty dissimilarity from anything they had known in civilian life convinced their seniors that it was the right thing to make the subalterns do – as indeed it was in those days of unmechanical warfare, when tactical mobility depended upon marching endurance and untended blisters could cripple a whole battalion – and partly because route-marching was, in the first months of their existence, almost the sole form of training of which the Kitchener divisions could get their fill. For many months rifles, even uniforms were lacking, so that the Pals' battalions could neither learn the trade of soldiers nor simulate their appearance. Only by endless drilling and marching in formation were these thousands of unblooded volunteers, still clad in civilian tweed, or a little later in postman's serge, of which 1915 yielded a strange surplus, able to remind roadside spectators, at times even themselves, that they were votaries of the Great Sacrifice. Many divisions received sufficient rifles to issue one to every man only within weeks of going to France in the autumn of 1915; and the equipments of the artillery, whose management was a great deal more complicated, were even slower to arrive. At least three divisions which were to attack on July 1st, 1916, came to the Western Front in a state of training which must be described as quite deficient. The 30th, 32nd and 34th Divisions (all belonging to the fourth 'hundred thousand' – K⁴ in the jargon of the period) had been raised only in December 1914, been allotted the meagrest cadre of experienced officers and N.C.O.s, had received their proper complement of weapons as late as the autumn of 1915 and yet were all shipped overseas between November 1915 and January 1916. The promise of tragedy which loomed about these bands of uniformed innocents was further heightened by reason of their narrowly territorial recruitment; what had been a consolation for the pangs of parting from home – that they were all Pals or Chums together from the same close network of little city terraces or steep-stacked rows of miners' cottages – threa-

tened home with a catastrophe of heartbreak the closer they neared a real encounter with the enemy. Grave enough in the case of the 30th, with its three Liverpool or Manchester brigades, the threat bore even more heavily on the 34th, containing not only the so-called Tyneside Irish and Tyneside Scottish Brigades – eight thousand young men all domiciled in or around Newcastle-on-Tyne – but also a Pioneer battalion, the 18th Northumberland Fusiliers, raised by the Newcastle and Gateshead Chamber of Commerce from the shop assistants of the city: the notion of a regiment of Kippseys and Mr Pollys fine-tunes the poignancy of the Pals idea.

From this it might be thought that the composition of a division not yet mentioned – the 36th – was potentially tragic; it was the most close-knit of all the Kitchener formations, its infantry having been raised wholly in Ulster (Ulster was the divisional subtitle). Its very existence, however, testified to the extreme militancy, and living military tradition, of the Protestant people from which it exclusively sprang. Half-Catholic though the nine counties of Ulster were, there were no Catholics in the 36th. Indeed its parent body – the Ulster Volunteer Force – had been raised well before the outbreak of the war, as a weapon of Protestant opposition to the grant of Irish Home – 'Rome' – Rule; and its leaders' offer to the British Government of its most able-bodied members as soldiers had come as a considerable relief to Westminster in the autumn of 1914, when the kingdom had seemed threatened by an Irish civil as well as a foreign war.

Completing the composition of the army which was to attack on the Somme were a number of formations whose foundation also antedated 1914, though by much longer than the U.V.F.'s. These were the Territorial Force divisions – the 46th North Midland, 48th South Midland, 49th West Riding and 56th London – whose existence recalled an earlier, mid-Victorian craze for amateur soldiering, brought on by a panic scare that Louis Napoleon's *navy* threatened the impregnability of the white cliffs and sustained by a simple bourgeois pleasure in the wearing of uniforms and the bandying-about of military titles. These Volunteers (the Ulstermen had pinched their emotive title) had eventually become an accepted, if slightly comic feature of the Victorian social fabric – accepted by the

respectable classes in a way the regulars were not, because they aspired after the military virtues without indulging in the military vices, found comical because their aspirations generally fell a little short of the mark. Some of the Territorial battalions, however, particularly the London ones, had latterly become very good, drawing on a stock of well-educated, games-playing young men to supply their ranks; Conan Doyle has Sherlock Holmes characterize a stockbroker's clerk who appears in one of his cases as 'representative of the type found in one of our better London Volunteer regiments', probably meaning the London Rifle Brigade or Queen Victoria's Rifles, both in 1916 forming part of the 56th Division which would attack at Gommecourt. And after the reorganization of 1908, even the more rustic Volunteer units had been brought to a standard of training nearer that of the regulars. At that date, indeed, and on swapping their title of Volunteers for that of Territorials, they had lost their old battalion numbers and been hitched on to the series of the regular county regiments. In consequence, a roll-call of battalions in the 46th (North Midland) Division, to take one example, made it sound like a segment of the regular army: it contained the 5th and 6th Battalions, South Staffordshire Regiment, 5th and 6th North Staffordshires, 4th and 5th Lincolns, 4th and 5th Leicesters, and 5th, 6th, 7th and 8th Sherwood Foresters (the Nottinghamshire and Derbyshire Regiment). But in human terms, each of these battalions represented a voluntary, part-time, peace-time effort at soldiering by the menfolk of one or another midland town, rural or industrial: Walsall, Wolverhampton, Burton, Hanley, Leicester, Loughborough, Lincoln, Grimsby, Newark, Nottingham, Derby, Chesterfield; and in practice their domestication was even more intimate, many of them having their component companies located in a suburb or outlying township, where the drill hall was as much part of the fabric as the nonconformist chapel — and run almost as soberly — and some having platoons centred on a single village. The same went for the artillery, engineers and services of the division, the 46th having its batteries at Louth, Boston, the Lincolnshire market town, Stoke-on-Trent (Arnold Bennett country), West Bromwich, one of Birmingham's drearier appendages, and Leek (whither Winston Churchill had *not*, trade union legend to the contrary, sent troops to

cow the miners in 1910). Its engineer field companies were located at Smethwick, another charmless outlier of Birmingham, and Cannock, a tiny country town, overwhelmed by its surrounding coalmines, on the edge of the magnificent countryside of the Chase.

In a more diffuse and traditional manner than the Kitchener divisions, therefore, those of the Territorial Force were a military embodiment of the regions from which they hailed. By the summer of 1916, however, many of their originals were invalidated or dead. For, following the destruction of the regular Expeditionary Force in the 1914 battles, it was the Territorials who, arriving in France in early 1915, had held the line until Kitchener's men could arrive. By the spring of 1916 a regular battalion like the 2nd Royal Welch Fusiliers (that extraordinary battalion of poets, wartime home both of Siegfried Sassoon and Robert Graves) still had left about 250 of the men who had accompanied it to France eighteen months before, demonstrating a drain of about ten soldiers a week — sometimes more, of course, sometimes less. The Territorials, though 'out' less long, had suffered a similar total loss, for they had started with weaker battalions and had had to detach men as cadres to their 'second line', on which new battalions were formed. In almost no battalion among those earmarked to attack on July 1st, therefore, had more than a quarter of the men, of whatever rank, memories of peacetime soldiering. Some of the regulars, by pulling in their Reservists and Special Reservists, could still field an almost complete turn-out of long service men. But among the remainder there was only a very little to choose, in terms of collective military experience, between the first and last joined.

The Tactics

Awareness of this lack of experience was strong at General and Fourth Army Headquarters, where the staffs had, in consequence, framed plans of stark simplicity for the infantry. The Fourth Army's eleven front-line divisions, of which six had not previously been in battle, were, on the cessation of the

artillery preparation, and following behind its barrage fire, to leave their trenches and walk forward, on a front of about fifteen miles, for a mile and a half. In the centre of the front, a walk of a little less than that distance would give them possession of the German second line of entrenchments; on the northern sector, the walk to the German second position was a good two miles; on the southern sector, the German second position was judged to be too far back for it to be taken in a single day and the objectives were accordingly set somewhat closer. Next to the British on the southern sector a French force, of which the insatiable demands of the Verdun battle progressively reduced the size until on July 1st it numbered thirteen divisions, was to attack up both banks of the River Somme, behind a great weight of artillery. French small-unit tactics, perfected painfully over two years of warfare, laid emphasis on the advance of small groups by rushes, one meanwhile supporting another by fire—the sort of tactics which were to become commonplace in the Second World War. This sophistication of traditional ‘fire and movement’ was known to the British but was thought by the staff to be too difficult to be taught to the Kitchener divisions. They may well have been right. But the alternative tactical order they laid down for them was oversimplified: divisions were to attack on fronts of about a mile, generally with two brigades ‘up’ and one in reserve. What this meant, in terms of soldiers on the ground, was that two battalions each of a thousand men, forming the leading wave of the brigade, would leave their front trenches, using scaling-ladders to climb the parapet, extend their soldiers in four lines, a company to each, the men two or three yards apart, the lines about fifty to a hundred yards behind each other, and advance to the German wire. This they would expect to find flat, or at least widely gapped, and, passing through, they would then jump down into the German trenches, shoot, bomb or bayonet any who opposed them, and take possession. Later the reserve waves would pass through and advance to capture the German second position by similar methods.

The manœuvre was to be done slowly and deliberately, for the men were to be laden with about sixty pounds of equipment, their re-supply with food and ammunition during the battle being one of the things the staff could not guarantee. In

the circumstances, it did indeed seem that success would depend upon what the artillery could do for the infantry, both before the advance began and once it was under way.

The Bombardment

The artillery fire plan was as elaborate as the infantry tactical scheme was simple. Artillery now comprised a great variety of weapons, firing several different sorts of ammunition: field artillery, the lightest and most plentiful variety, composed of 18-pounder guns and 4.5-inch howitzers, which fired small shrapnel or high explosive or (more rarely) gas shells out to a range of about six thousand yards; medium artillery—60-pounder and 4.7-inch or 6-inch guns which fired high explosive shells out to ten thousand yards; and a variety of heavy howitzers, 6-, 8-, 9.2-, 12- and 15-inch calibre which dropped 100- to 1400-pound shells from a high angle at ranges between five and eleven thousand yards. In addition, the infantry brigades controlled their own ‘trench mortars’, simple smooth-bore tubes which lobbed 2-inch, 3-inch or 4-inch bombs in a very steep trajectory from one trench to another across no-man’s-land.

Range, weight of shell and trajectory determined what the different tasks of these weapons should be. Trench mortars, having the shortest range and firing a projectile without any penetrative power, were turned against nearby surface targets, the enemy’s trenches, which they were intended to collapse, and his wire, which they were expected to help cut. Wire-cutting was indeed the most fundamental of the artillery’s duties, for should the German entanglements remain intact on the morning of Z-Day (the day of the attack), the infantry advance would terminate on the far side of no-man’s-land. The belts were very thick. Accordingly the 18-pounders of the divisional field artilleries were also assigned almost exclusively to wire-cutting—though their fire, with the shrapnel shell of the period and its slow-acting fuse, tended to waste itself in the ground *under* the entanglements (instead of bursting on ‘graze’ against the wire). Some of the 18-pounders’ fire was also allocated, however, to ‘counter-battery’—firing, that is, at the

estimated positions of the enemy's guns, in the hope of knocking them out before the infantry had to advance through the barrage which those could put down on to the British parapet and into no-man's-land. What little gas shell was available was to be chiefly reserved for last-minute counter-battery fire, the British artillerymen understanding how difficult their German opposite numbers would find it to work guns while wearing gas-masks.

Howitzers and the heavier guns had the task of material destruction — of communication trenches, approach roads, railway spurs, of anything which aided the movement of men and supplies into the trenches which were to be attacked, but above all of strongpoints and machine-gun posts. These were of different sorts. In several places, notably where the German front crossed the site of a former village, the defences were notably stronger than in the open fields between. For although the Germans had excavated thirty-foot-deep dug-outs at regular intervals all along their front, which were proof against a direct hit by any weight of shell, and had thus assured that their trench garrisons would be alive even at the end of a prolonged British bombardment, these 'field' positions could not be given, without enormous extra labour, the complex illogicality presented to an attacker by the ruin of an inhabited area. In some spots, like the Leipzig salient between the devastated villages of Thiepval and Pozières, sporadic local attack and counter-attack had produced a maze of trenches as impenetrable as any ruin; and elsewhere, as at the Schwaben Redoubt, the Germans had thought it worth devoting the necessary spadework to building an artificial fortress-entrenchment. But the villages were the most important revetments of the German line; and the most important ingredient in the Germans' scheme of defence for these strongpoints was the fire of machine-guns. It was to the destruction of their emplacements, or the entombment of their crews in their positions of shelter, that the British heavy artillery was to devote its bombardment during the six days of 'preparation'.

The machine-gun was to be described by Major-General J. F. C. Fuller, one of the great *enragés* of military theory produced by the war, as 'concentrated essence of infantry', by which he meant his readers to grasp that its invention put into

the hands of one man the fire-power formerly wielded by forty. Given that a good rifleman could fire only fifteen shots a minute to a machine-gunner's six hundred, the point is well made. But, as Fuller would no doubt have conceded if taxed, a machine-gun team did not simply represent the equivalent of so many infantrymen compressed into a small compass. Infantrymen, however well-trained and well-armed, however resolute, however ready to kill, remain erratic agents of death. Unless centrally directed, they will choose, perhaps badly, their own targets, will open and cease fire individually, will be put off their aim by the enemy's return of fire, will be distracted by the wounding of those near them, will yield to fear or excitement, will fire high, low or wide. It was to overcome influences and tendencies of this sort — as well as to avert the danger of accident in closely packed ranks — that seventeenth- and eighteenth-century armies had put such effort into perfecting volley fire by square, line and column. The result was to make an early-nineteenth-century — Waterloo — infantry regiment arguably more dangerous to approach than a late-nineteenth-century — Boer War — one. For though the latter had better weapons than the former, and ones which fired to a much greater range, these technical advantages were, if not cancelled out, certainly much offset by the dispersion of the soldiers which the very improvement of firearms itself enjoined — dispersion meaning lack of control, which in its turn results in poor musketry. Hence the wonder with which the machine-gun was viewed when Maxim first made it a practicable weapon of war. For it appeared to have put back into the hands of the regimental commander the means to inflict multiple and simultaneous wounding by the giving of a single word of command. But the appearance of the machine-gun was, of course, very much more than a reversion to a former order of things. For the most important thing about a machine-gun is that it is a *machine*, and one of quite an advanced type, similar in some respects to a high-precision lathe, in others to an automatic press. Like a lathe, it requires to be set up, so that it will operate within desired and predetermined limits; this was done on the Maxim gun, common to all armies of 1914-18, by adjusting the angle of the barrel relative to its fixed firing platform, and tightening or loosening its traversing screw. Then,

like an automatic press, it would, when actuated by a simple trigger, begin and continue to perform its functions with the minimum of human attention, supplying its own power and only requiring a steady supply of raw material and a little routine maintenance to operate efficiently throughout a working shift. The machine-gunner is best thought of, in short, as a sort of machine-minder, whose principal task was to feed ammunition belts into the breech, something which could be done while the gun was in full operation, top up the fluid in the cooling jacket, and traverse the gun from left to right and back again within the limits set by its firing platform. Traversing was achieved by a technique known, in the British army, as the 'two inch tap': by constant practice, the machine-gunner learned to hit the side of the breech with the palm of his hand just hard enough to move the muzzle exactly two inches against the resistance of the traversing screw. A succession of 'two inch taps' first on one side of the breech until the stop was reached, then on the other, would keep in the air a stream of bullets so dense that no one could walk upright across the front of the machine-gunner's position without being hit – given, of course, that the gunner had set his machine to fire low and that the ground was devoid of cover. The appearance of the machine-gun, therefore, had not so much *disciplined* the act of killing – which was what seventeenth-century drill had done – as *mechanized* or *industrialized* it.

It was this automatic and inhuman lethality of the machine-gun which determined that the posts from which it would operate must be the principal target of the heavy artillery between June 25th and 30th. Unfortunately for the British infantry, the heavy howitzer of 1916 was a piece of technology very much less developed towards perfection, relative to its potential, than was the machine-gun. The desirable characteristics of the machine-gun, besides those of functional efficiency, were portability, concealability and compactness. The Maxim met the first fairly, the other two very well. The desirable characteristics of the heavy howitzer were pin-point precision and intense concussive effect. These neither the 6-, 8- or 9.2-inch howitzer achieved (the larger calibres were too few in number to matter). Their shells had an aiming error of at least twenty-five yards and an explosive power insufficient to collapse the

very deep dug-outs – 'mined' dug-outs, the British called them, for they were driven by mining technique thirty feet below the surface – in which the machine-gunners sheltered, with their weapons, during a bombardment. Thus the British could not destroy the kernel of a German strongpoint. The best they could hope to do was to trap the crews below ground by choking the entrance shaft with spoil from the collapsed trench; but to hit the shaft, unless by luck, required either an altogether more revealing sort of air photograph than the Royal Flying Corps' cameras could supply or else constant, life-wasting raiding across no-man's-land to locate precisely where the dug-out entrances lay.

If we look, then, at the preliminaries to the attack of July 1st as a struggle between competing technologies, between the manifest power of the British artillery and the latent power of the German machine-guns, it will be seen clearly as a struggle the British waged on unequal terms – and terms which they failed to reverse, despite achieving the appearance of terrible devastation. The bombardment opened on June 24th. It was intended to last five days, but a postponement of Z-Day extended it to seven. Over the period, about 1,500,000 shells from the stocks which had been dumped were fired – 138,000 on June 24th, 375,000 on June 30th. Much the greater number – about a million – were 18-pounder shrapnel shells; the 6-inch howitzers fired about 80,000, the 8- and 9.2-inch about 50,000 each. These are impressive totals. To achieve them the artillery crews had to labour, humping shells or heaving to re-align their ponderous weapons (the 8-inch howitzer weighed thirteen tons), hour after hour throughout the day and for long periods of the night. At the receiving end, the noise, shock-waves and destructive effect were extremely unpleasant. At first the Germans in the trenches opposite thought the bombardment heralded an attack and stood to arms in their dug-outs. Then, as the shelling continued, waxing and waning in strength, they realized that they were in for a long ordeal and settled down to bear it as best they could.

During June 25 ... the fire of the British ... batteries increased, and whereas on the previous day nine-tenths of the fire had been shrapnel or from guns of small calibre

[shrapnel was disregarded because its scatter of man-killing pellets was of very little effect against entrenchments], the heavy batteries seemed now in the majority. Their shells crashed into the German trenches, the ground shook and the dug-outs tottered. Here and there the sides of a trench fell in, completely blocking it. Masses of earth came tumbling into the deep dug-outs, obstructing all entrances [which of course faced *away* from the direction of the shelling] to many of them. By evening some sectors of the German front-line were already unrecognizable and had become crater-fields.*

The British next began to mix gas with their shelling, using primitive projectors and the prevailing wind-stream to carry it across no-man's-land.

In the early hours [of June 26] clouds of chlorine gas ... reached the German position [near Fricourt] and, being heavier than air, filled every crevice in the ground. The dense fumes crept like live things down the steps of the deep dug-outs, filling them with poison until sprayers negated their effect ... during the afternoon aerial torpedoes, fired from heavy mortars in the British front-line, made their first appearance. Coming down almost perpendicularly from a great height, these monsters bored deep into the ground and then burst. [This reference is almost certainly not to mortar bombs but to the shells of the super-heavy howitzer, fortunately for the Germans very few in number.] Tons of earth and great blocks of chalk and rock were hurled into the air, leaving craters, some twelve feet deep and fifteen feet in diameter. Only deep dug-outs of great strength could stand the shock ... The Germans, who up till now had endured the inferno almost with indifference, began to feel alarmed. Every nerve was strained as they sat listening to the devilish noise and waited for the dull thud of the next torpedo as it buried itself in the ground, and then the devastating explosion. [The similar experience of listening to the Krupp 420mm siege-howitzers 'walking' their shells up to the target had driven men hysterical inside the Liège forts in August,

* From *If Germany Attacks* by Captain G. C. Wynne.

1914.] The concussion put out the candles and acetylene lights in the deepest dug-outs. The walls rocked like the sides of a ship and the darkness was filled with smoke and gas fumes ... The 27th and 28th June brought a similar picture of continuous devastation ... The bombardment continued to appear without method, an intense and apparently wild shelling, then carefully observed heavy artillery fire by individual batteries, then trench-mortar bombs and aerial torpedoes or gas attacks, or again a sudden tornado of shells, with occasional periods of complete quiet.

June 30th was a repetition of the previous six days. The German front defences no longer existed as such ... [But] in spite of the devastation and chaos on the surface, the defenders in those of the deep dug-outs still intact (the majority) had ... survived the ordeal. For seven days and nights they had sat on the long wooden benches or on the wire beds in the evil-smelling dug-outs some twenty feet and more below ground. The incessant noise and the need for constant watchfulness had allowed them little sleep, and ever-present, too, had been the fear that their dug-outs might at any time become a living tomb from which escape would be impossible. Warm food had seldom reached them ... so that they had had to live on [iron rations].

But they were alive.

At 6.30 a.m., however, [on July 1st] a bombardment of an intensity as yet unparalleled suddenly burst out again along the whole front. At first it was most severe in the centre, about Thiepval and Beaumont, but it spread quickly over the entire line from north of the Ancre to south of the Somme. For the next hour continuous lines of great fountains of earth, rocks, smoke and debris, played constantly into the air ... The giant explosions of the heaviest shells were the only distinguishable noises in the continuous thunder of the bombardment and short, regular intervals of their bursts gave it certain rhythm. All trace of the front-trench system was now lost, and, with only a few exceptions, all the telephone cables connecting it with the rear lines and batteries were destroyed, in spite of the

six feet of depth at which they had been laid. Through the long periscopes held up out of the dug-outs could be seen a mass of steel helmets above the British parapet... The Germans in their dug-outs, each with a beltful of hand-grenades, therefore waited ready, rifle in hand, for the bombardment to lift from the front trench to the rear defences. It was of vital importance not to lose a second in reaching the open before the British infantry could arrive at the dug-out entrances.

The battle was about to begin. And its first, and indeed decisive act was to be the 'race for the parapet'—a race which for the British ran from their own front trench to the other side of no-man's-land, for the Germans from the bottom to the top of their dug-out steps. Whoever first arrived at the German parapet would live. The side which lost the race would die, either bombed in the recesses of the earth or shot on the surface in front of the trench. Every British effort had been directed to ensuring that the Germans lost the race—that they would indeed lack the runners to make it a contest. But, as we have seen, the majority of the German trench garrisons still lived at zero hour on Z-Day. How had the British artillery effort been expended to such little purpose?

The greater part of the answer is revealed by isolating the proportion of active ingredient in the British bombardment; that is, of explosive delivered to the German-occupied area. The weight of shells transported to the British guns was about 21,000 tons, excluding propellant (the explosive needed to drive the shell up the barrel at the moment of firing). It had taken the efforts of about fifty thousand gunners (almost the number of Wellington's army at Waterloo), working for seven days, to load this weight into their pieces and fire it at the enemy—or, more precisely, into the area, 25,000 by 2,000 yards square, which the British infantry were to attack. In crude terms, this meant that each 2,500 square yards had received a ton of shells; or, if numbers of shells are used for the calculation—and about 1,500,000, had been fired—that each 1,000 square yards had received 30 shells. However, about a million of the shells were shrapnel, fired by the 18-pounder field guns of the divisional artilleries, and these could do very little

damage to earthworks, since they were filled only with light steel balls, and only a little more to wire, though it was their alleged wire-cutting capability which justified the firing of the enormous number used. In fact, the 18-pounders were set to firing shrapnel because the ammunition factories in England could not yet produce high-explosive shell for them in any quantity, though almost everyone in the B.E.F. from G.H.Q. officer to simple gunner had now come to realize that it was high explosive alone which did serious damage to an entrenched enemy.

Discounting the shrapnel, therefore, we are left with the output of the howitzers and heavy guns—about half a million shells of 12,000 tons weight. The lightest and most plentifully expended shell was that of the 4.5-inch field howitzers of the divisional artilleries, which weighed 35 pounds; the heaviest, that of the 15-inch howitzers, which weighed 1,400 pounds—but of which there was a strictly limited ration, there being only six of these monster guns on the battlefield. Nevertheless, their contribution to the bombardment—about 1,500 shells, weighing a thousand tons—is impressive, and all the more so if we recall that Napoleon had with him at Waterloo only about a hundred tons of artillery projectile in all. Comparisons between the artillery efforts of 1815 and 1916 are pointless, however, for Napoleon's gunners had had the fairly simple task of firing solid shot from close range at dense and immobile masses of soldiers upon whom a hit meant a kill; Haig's gunners, by contrast, could not see their target and could not be sure that, even if they hit it, their fire would have a lethal effect. That this should be so was due to the very small proportion of explosive contained within the casing of the shell. The 1,400-pound shell of the 15-inch howitzer, for example, contained 200 pounds of explosive (Ammatol, a mixture of TNT and Ammonium Nitrate); the 35-pound shell of the 4.5-inch howitzer contained only four pounds ten ounces. The explanation of this disparity between total weight of shell and weight of filling was twofold: the stresses to which the shell was subjected during firing required that it have a very strong, and therefore heavy, casing, if it were not to disintegrate inside the gun with disastrous effect; while the purpose of the shell, as conceived by its designers, was to produce a large number of steel splinters, travelling at

man-killing speed, as a by-blow of its explosion. For that reason, most shells were fused to explode on impact, their detonation producing those enormous fountains of earth and smoke which are the staple feature of First World War battlescapes.

It is these fountains which give the game away. Out of the 12,000 tons weight of shell delivered on to the German-occupied area, only about nine hundred tons represented high-explosive. And the greater part of that small explosive load was dissipated in the air, flinging upwards, to be sure, a visually impressive mass of surface material and an aurally terrifying shower of steel splinters, but transmitting a proportionately quite trifling concussion downwards towards the hiding places of the German trench garrisons. Each ten square yards had received only a pound of high-explosive, or each square mile about thirty tons. Twenty-eight years later, the Allied air forces would put down on German positions in Normandy, and in minutes not days, something like eight hundred tons of bombs to the square mile, most of that tonnage consisting of high-explosive, for free-falling bombs, being unsubjected to stress, can be given the thinnest and lightest of cases. Today, NATO tactical doctrine would regard the Somme position as a suitable target for several small nuclear warheads, each of which would yield many thousand tons of TNT equivalent to the square mile. But some of the defenders, if properly dug in under overhead cover, would still be expected to survive—as many German soldiers who cowered under the aerial preparation for Operations Goodwood and Cobra in July 1944 survived to man their weapons against the British and American tank columns which emerged through the dust of the bombing.

We can see now, therefore, that the great Somme bombardment, for all its sound and fury, was inadequate to the task those who planned it expected of it. The shells which the British guns had fired at the German trenches, like those which a month earlier had broken up on the armoured skins of the German battleships at Jutland, were the wrong sort of projectile for the job, and often badly made. And while the British naval gunners had been able to see, and knew how to hit, their targets, the British field and garrison gunners, many of them amateurs, had largely to guess at where their real targets, the German machine-gun crews, were hidden, and then very

often lacked the skill to put a shell where they wanted it to fall. Hence, despite the precision of the fire plan, that haphazard cratering of the battlefield, sometimes on, sometimes beyond, sometimes short of the German trench line and wire entanglements, which all observers of the Somme front mention.

The Final Preliminaries

The infantry, fortunately, remained largely unaware of the random and unsatisfactory result of the shelling which had filled their ears with sound for the last week, during every hour of the day and many of the nights. There was a good deal of individual apprehension. 'It was the Division's first battle', wrote the historian of the 18th, 'and the solemnity of the occasion affected everyone.' Private Gilbert Hall, of the 1st Barnsley Pals (13th York and Lancs) was not feeling quite himself and had got a headache from the bombardment. Capt. E. C. T. Minet, machine-gun officer of the 11th Royal Fusiliers, felt himself 'sweating at zero hour. But that, I suppose, was nervous excitement.' Private Frank Hawkings, of Queen Victoria's Rifles, had found that since June 29th 'the suspense very trying and everyone ... very restless.' But the long notice of the battle which everyone who was to be in it had been given—a new development in warfare and a function of the complex preparation which battles of the industrial age require—had allowed men the chance to make what personal accommodation with their fears they could. Most had written home, made out their wills, shaken hands with their pals. Many had gone to church. Each battalion of the B.E.F., the army of a church-going age and nation, had its own chaplain of the appropriate denomination, and they had held services behind the lines a day or two beforehand. Second-Lieutenant John Engall, of the 16th London Regiment, wrote home 'the day before the most important of my life ... I took my Communion yesterday with dozens of others who are going over tomorrow and never have I attended a more impressive service. I placed my body in God's keeping and I am going into battle

with His name on my lips, full of confidence and trusting implicitly in Him.' Like so many other subalterns of the London division, Engall was to die outside Gommecourt. His explicit piety, which would have jarred with most of Wellington's ensigns, came as naturally to him as to them their stylish indifference. But it would not necessarily have surprised them; the attendance at (Anglican) Communion of 'the dozens of others' – private soldiers of his regiment – most certainly would have done. The irreligiosity of their private soldiers was part and parcel of an altogether rougher persona than even the most hardened old-sweat regiments of 1914 could show.

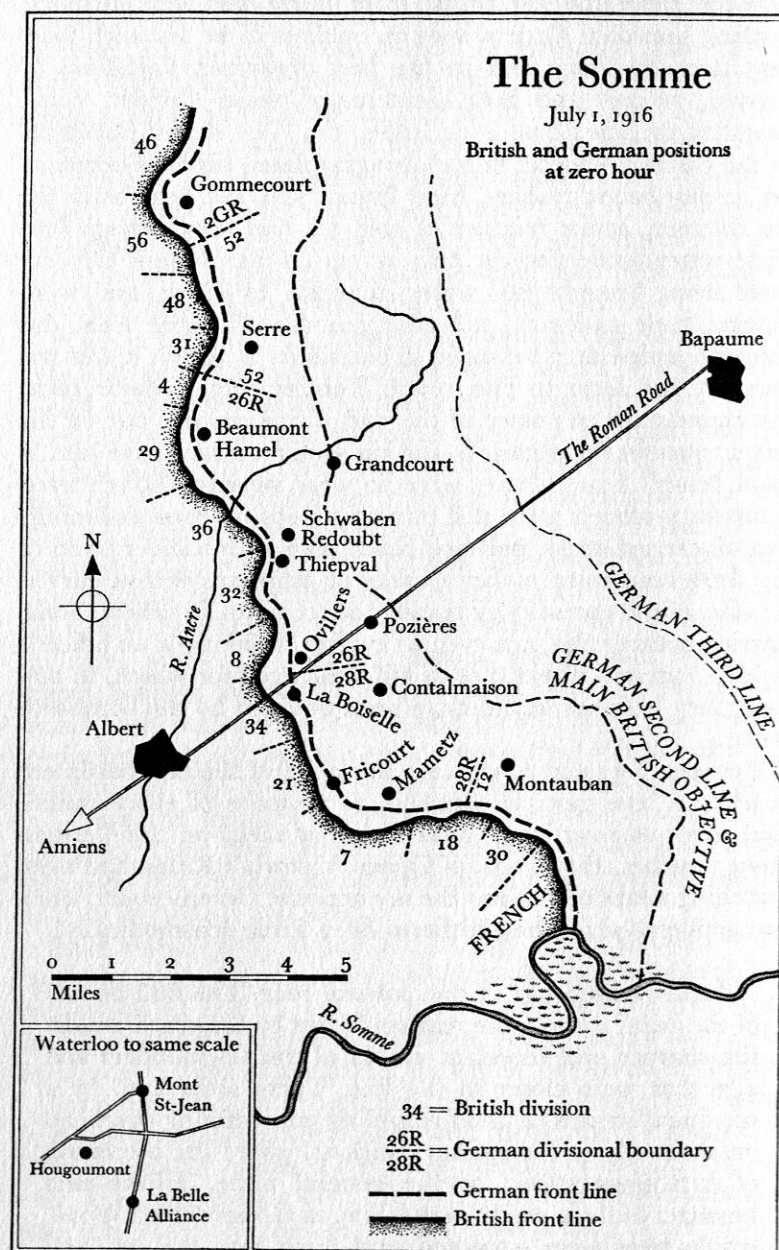
It was a help, too, in calming fears that the last hours before zero were filled for most infantry soldiers with a carefully time-tabled programme of activity. The attacking battalions, which were out of the line, had to march up to the trenches from the villages where they had been billeted, first along the roads, then in the communication trenches which covered the last mile. On the way the men accumulated a growing load of kit. Starting with two hundred rounds of ammunition and two days' rations, they successively picked up new empty sandbags (to fortify the positions they were to take), a wiring stake (for the same purpose), grenades, shovels, rockets and sometimes pigeon baskets, the two last items to help their officers communicate with the rear once they had passed beyond cablehead in the front trench. All this took a great deal of time, and the columns had also to press forward against a flow of men coming down the trenches from the battalions which were being relieved. When they arrived at their jumping-off places, the men were glad to huddle under a blanket or greatcoat on the floor of the trench and sleep.

Most awoke early, to find a light rain falling through white morning mist. In places it lingered even after the bombardment had struck up at 6.25 a.m. for the regular morning session, so that Lieutenant Chetwynd-Stapleton, on air patrol above the front, saw 'a bank of low cloud' on which 'one could see ripples ... from the terrific bombardment that was taking place below. It looked like a large lake of mist, with thousands of stones being thrown into it.' Across the greater breadth of the front, however, the mist quickly cleared, giving way to bright sunshine from a brilliant cloudless sky. Into it little plumes of smoke rose

here and there from the British front where men were furtively cooking breakfast. Orders were for soldiers to be fed with food sent from the rear, and in the best organized battalions it arrived, prompt and hot. Lieutenant-Colonel Crozier, commanding the 9th Royal Irish Rifles (the West Belfast Battalion of the Ulster Volunteer Force), congratulated his cook-sergeant on having bacon rashers, fried bread, jam and tea ready for his riflemen, and a mixture of cold tea and lemon to go into their water-bottles for the trip across no-man's-land. Officers were being brought hot water in which to shave, and were tidying their uniforms, still conspicuously different from the soldiers', unless they belonged to battalions in which it was not thought bad form to don rough Tommy serge. Major Jack, commanding a company of the 2nd Cameronians, put on his silver spurs for the occasion, and his soldier servant gave him 'a final brush'. Few, if any, were to wear swords (though even temporary officers were still buying swords on commissioning) but all carried sticks, polished blackthorn with a silver band in the Irish regiments, malacca canes or ashplants with a curved handle, of the sort sold by seaside tobacconists, in others. Some carried nothing else, not even a revolver, thinking it an officer's role to lead and direct, not to kill – the need for which, in any case, they believed would have been nullified by the bombardment.

Between 6.30 and 7.30 a.m., the noise of the bombardment reached a level not yet touched, as weapons of every calibre and sort put down their final ration of shells on the German front trenches. Hawkings, of Queen Victoria's Rifles, had been watching a lark climb into the sky opposite Gommecourt, when the artillery, which had hitherto been firing spasmodically,

suddenly blazed out in one colossal roar. The dull booms of the heavy guns in the rear could just be discerned amidst the sharper and incessant cracks of the 18-pounders and 4.7s that were closer to the line. There seemed to be a continual stream of shells rumbling and whining overhead on their way to the enemy positions, where the succession of explosions added to the general noise. Fifteen-inch howitzer and 9.2 shells were falling in Gommecourt Wood, whole trees were uprooted and flung into the air, and



eventually the wood was in flames. The landscape seemed to be blotted out by drifting smoke; but as part of our scheme was to set up a smoke screen we commenced throwing out smoke bombs.

Under the weight of this cannonade, the Germans crouched invisible in their dug-outs, waiting for the moment it should lift as the signal to race up exit shafts. Meanwhile the soldiers of the 1st Somerset Light Infantry sat on the parapet of their trench opposite, laughing and cheering at the sight of the detonations.

Some other soldiers were also already out of their trenches, where the last thing almost everyone had received was a strong tot of rum – Navy rum, and extremely alcoholic. In the 11th Suffolks, two men who had got the teetotallers' share drank themselves insensible and could not be got on to their feet again; and J. F. C. Fuller, investigating a confusion in the Sherwood Forester Brigade, was told that the whole of the leading wave was drunk. He thought the story an exaggeration – which it almost certainly was – but, knowing that 'in many cases men deliberately avoided eating before a battle, for fear of being shot through a full stomach' and discovering that 'through some error' the first line got the rum ration intended for the second as well as their own, he concluded that 'many of the men in the front line must have been drunk well before zero hour.' A strong tot of rum, whatever its functional effect, must have been particularly comforting to the men in those divisions whose commanders had decided to take them out of the trench to lie down in no-man's-land before zero – the 8th, 36th, 46th and 56th and part of the 32nd.

The signal for these men to stand up and advance, for those in the trenches to climb their scaling ladders and leap over the parapet into no-man's-land, was to be the shrill of the platoon officers' whistles, blown when their synchronized watches showed 7.30 a.m. In four places, however – Mametz on the 7th Division's front, Fricourt (21st Division), La Boisselle (34th Division), and Beaumont Hamel (29th Division) – the signal, about ten minutes ahead of zero, was to be the detonation of eight enormous mines which had been tunnelled under the German trenches and filled with dynamite.

The Battle

Despite the immense growth of complexity of the machinery and business of war which had taken place in Western armies since 1815, the Battle of the Somme was to be in many ways a simpler event than Waterloo—not, indeed, in terms of the strains of management it threw on commanders and their staffs, but in the range and nature of the encounters between different categories of armed groups which took place on the ground. At Waterloo we counted seven different sorts of encounters: artillery versus artillery, infantry and cavalry, cavalry versus cavalry and infantry; infantry versus infantry; and single combat. Several of these could or did not occur on the Somme. The horse, for example, had disappeared from the battlefield, though to the regret of almost every soldier—even infantry officers speak lovingly of their horses—and temporary work in the transport section of infantry regiments was eagerly sought after by the men, who seemed to find in caring for animals an outlet for the gentler emotions to which they could give no expression among their fellows. Haig had had three cavalry divisions brought up to the Somme front, but they were neither expected to, nor did they, play any part on July 1st, or any other day in 1916. Single combat, too, had ceased to be an option, for soldiers on a bullet-lashed battlefield could neither assume the posture nor risk the exposure-time necessary for the exchange of blows, even if haphazard encounter brought them together. The nearest thing to single combat in trench warfare ('him or me' bayonet thrusting excepted), was perhaps the game of 'bombing up the traverses', of which the most striking feature, so characteristic of the First World War, was that one did not see one's enemy. Thus there were only three sorts of encounter possible on the field of the Somme: artillery versus artillery; artillery versus infantry; and infantry versus infantry—though, if we treat machine-gunners as a separate category, we also get infantry versus machine-gunners and artillery versus machine-gunners.

We have already seen how much or little success artillery had had in attacking infantry and machine-gunners, and in

attacking other artillery. Many of the German batteries had had guns disabled and crews killed during the preliminary bombardment. But enough remained to put down spoiling bombardments on the British front trenches at the moment of the attack—a company of the Queen Victoria's Rifles, crowded into their assembly trenches, were struck by a sudden stream of shells at about 7 a.m. and had forty men killed or wounded in a few minutes—and to fire standing barrages into no-man's-land the instant they got the signal that the British had left their trenches. These sorts of encounter apart, how did the infantry fare, on both sides, once the British had left their trenches to advance to the assault?

Infantry versus Machine-gunners

Several survivors have left accounts of the first moments of the attack. Queen Victoria's Rifles, a leading battalion of 56th London Division in VII Corps' diversionary attack on the northern flank of Fourth Army, had about five hundred yards of no-man's-land to cross; Royal Engineer companies laid smoke from dischargers to cover their advance. Some time after seven o'clock, the Germans 'began spraying our parapets with machine-gun bullets, but sharp to the minute of zero' (7.25 a.m. for this division) 'we erected our ladders and climbed out into the open. Shells were bursting everywhere and through the drifting smoke in front of us we could see the enemy's first line from which grey figures emerged ... We moved forward in long lines, stumbling through the mass of shell-holes, wire and wreckage, and behind us more waves appeared.' Towards the centre of the Fourth Army's front, the 9th Royal Inniskilling Fusiliers, of the 36th Ulster Division, were in the leading wave. Their commanding officer, Ricardo,

stood on the parapet between the two centre exits to wish them luck ... They got going without delay, no fuss, no running, no shouting, everything solid and thorough—just like the men themselves [these were farming people from County Tyrone]. Here and there a boy would wave his

hand to me as I shouted good luck ... through my megaphone. And all had a cheery face. Most were carrying loads. Fancy advancing against heavy fire with a big roll of barbed wire on your shoulder!

Describing a second wave attack, in an account which holds good for the first, Gilbert Hall of the 1st Barnsley Pals (13th York and Lancasters, 31st Division), heard his officer blow his whistle 'and C Company climbed over the parapet and moved forward to be confronted with ... a long grassy slope rising gently to a series of low crests about six hundred yards in front. The German trenches were clearly visible, three lines of fortifications with sand-bagged parapets, enabled by the slope of the ground to fire over each other into the advancing British infantry. In front of the enemy lines lay thick belts of uncut wire, breached by a few narrow gaps.' Towards that wire the Barnsley Pals set off, as up and down the line at zero did sixty thousand other infantrymen. In some battalions, the men were able to walk upright, with arms sloped or ported, as they had been expecting. In others they were soon bent forward, like men walking into a strong wind and rain, their bayonets fixed and their rifles horizontal. 'Troops always, in my experience', wrote Lord Chandos, whose observation this is, 'unconsciously assume this crouching position when advancing against heavy fire.'

Most soldiers were encountering heavy fire within seconds of leaving their trenches. The 10th West Yorks, attacking towards the ruined village of Fricourt in the little valley of the River Ancre, had its two follow-up companies caught in the open by German machine-gunners who emerged from their dug-outs after the leading waves had passed over the top and onward. They were 'practically annihilated and lay shot down in their waves'. In the neighbouring 34th Division, the 15th and 16th Royal Scots, two Edinburgh Pals' Battalions containing a high proportion of Mancunians, were caught in flank by machine-guns firing from the ruins of La Boisselle and lost several hundred men in a few minutes, though the survivors marched on to enter the German lines. Their neighbouring battalions, the 10th Lincolns and 11th Suffolks (the Grimsby Chums and the Cambridge Battalion) were caught by the same flanking fire;

of those who pressed on to the German trenches, some, to quote the official history 'were burnt to death by flame throwers as [they] reached the [German] parapet'; others were caught again by machine-gun fire as they entered the German position. An artillery officer who walked across later came on 'line after line of dead men lying where they had fallen'. Behind the Edinburghs, the four Tyneside Irish battalions of the 103rd Brigade underwent a bizarre and pointless massacre. The 34th Division's commander had decided to move all twelve of his battalions simultaneously towards the German front, the 101st and 102nd Brigades from the front trench, the 103rd from the support line (called the Tara-Usna Line, in a little re-entrant known to the brigade as the Avoca Valley—all three names allusions to Irish beauty spots celebrated by Yeats and the Irish literary nationalists). This decision gave the last brigade a mile of open ground to cover before it reached its own front line, a safe enough passage if the enemy's machine-guns had been extinguished, otherwise a funeral march. A sergeant of the 3rd Tyneside Irish (26th Northumberland Fusiliers), describes how it was: 'I could see, away to my left and right, long lines of men. Then I heard the "patter, patter" of machine-guns in the distance. By the time I'd gone another ten yards there seemed to be only a few men left around me; by the time I had gone twenty yards, I seemed to be on my own. Then I was hit myself.' Not all went down so soon. A few heroic souls pressed on to the British front line, crossed no-man's-land and entered the German trenches. But the brigade was destroyed; one of its battalions had lost over six hundred men killed or wounded, another, five hundred; the brigadier and two battalion commanders had been hit, a third lay dead.* Militarily, the advance had achieved nothing. Most of the bodies lay on territory British before the battle had begun.

In the neighbouring 32nd Division, the 16th Northumberland Fusiliers (Newcastle Commercial) and the 15th Lancashire Fusiliers (1st Salford Pals) were also hit by machine-gun fire from Thiepval as they got out of their trenches, the Newcastle Commercial following a football kicked by a well-known north country player. Several waves were cut down at once and the

* In the Tyneside Scottish Brigade, all four battalion commanders were killed on July 1st.

commanding officers ordered the untouched companies to stay in their trenches. In the swampy valley of the Ancre, several battalions of the Ulster Division were enfiladed by German machine-guns as the men tried to cross no-man's-land, there four hundred yards wide. Casualties were worst in the 9th Royal Irish Fusiliers (the Armagh, Monaghan and Cavan battalion of the U.V.F.), 532 officers and men going down as rush after rush towards the wire—orthodox tactics learnt on Irish hillsides in make-believe battles four years before—was stopped by bursts of bullets; losses in two others were almost as heavy. In the regular 29th Division on the Ulstermen's left, several battalions suffered the worst of First World War experiences: to advance across no-man's-land under heavy fire only to find the enemy's wire uncut (it was uncut at many places elsewhere also) and to be machine-gunned down while searching for a way through. Among them were the 1st Royal Inniskilling Fusiliers, the same Inniskillings who had stood in square to be cannonaded throughout the afternoon near the crossroads at Waterloo a hundred and one years before. Opposite Beaumont Hamel, fired on by German machine-gunners who had emerged from the recesses of Y Ravine, into which the Division's amateur gunners had tried but failed to drop a shell during the bombardment, 568 Inniskillings became casualties in a few minutes, of whom 246 died. Shortly afterwards the only battalion from the Empire to take part in the Somme attack, the 1st Newfoundland Regiment, raised exclusively from native-born Newfoundlanders, tried to find a way where the Inniskillings had found none and in the attempt lost more men killed, wounded or missing—710, including all the officers—than any other battalion was to do on July 1st (though the 10th West Yorks had just lost exactly the same number opposite Fricourt, on the 21st Division's front). Finally, on the 46th (North Midland) Division's front, at the extreme northern edge of the battlefield, the 1/6th North Staffords and the 1/6th South Staffords, Territorial battalions from Wolverhampton and Hanley, each had their leading companies caught by fire opposite uncut wire, on which most who arrived there were shot or bombed by the defenders.

Infantry versus Infantry

Perhaps twenty battalions of the attacking force, out of sixty committed to the first wave, had thus been disabled in no-man's-land by machine-gun fire, to which they had been unable to reply and whose source they had generally been unable to identify. A number had also suffered casualties from German barrage fire—true barrage fire, in that it took the form of a continuous fall of shells along a predetermined line in no-man's-land—laid by guns which had either escaped destruction by the British batteries or had remained 'masked' (present but silent, and so undetectable), or else had arrived on the Somme front towards the conclusion of the bombardment—an event which had given the German high command all the notice to reinforce any general could require. The barrage had been particularly heavy on VIII Corps' front, perhaps because its gunners were notably less well-trained even than the rest in that underskilled army; it was there that there was most uncut wire, additional proof of incompetent gunnery.

But for the battalions which had got through, the worst, in a collective sense, was now over, for entry into the German positions meant that the German gunners could no longer put down on them a barrage, their own troops being mixed up with the attackers, while the attackers themselves could take advantage of the Germans' own trenches to shelter from the German infantry's bombs and bullets. In practice, things were less simple and far more dangerous than this thumbnail analysis suggests, for the British could not remain in the German trenches they had reached, having objectives to reach which lay much deeper within German trenches, yet *had* to remain to fight for a while if they were not to be attacked in the rear when they pushed on. The Germans, moreover, had enough of their telephone cable network intact sometimes to be able to inform their batteries which trenches were in British hands, and so to be able to call down fire on them. The British had no such link with their artillery, the telephone lines they had trailed across no-man's-land having almost without exception, and to no one's surprise, been cut. As a result, and to

complicate the pattern of activity in those battalions which had entered the German front line, the attackers were under an obligation, both to consolidate—clear the captured trench of any resisting Germans—and to ‘follow the barrage’—to walk off whither the next curtain of shellfire played on the second or third line of German trenches or on an intervening ‘shellhole position’; some divisional artilleries had allowed for as many as six of these ‘lifts’.

Following a shrapnel barrage was, for all the tumult produced, not in itself a dangerous thing to do, given accurate gunnery, for the cast of shrapnel is forward, only the occasional base-plate whining back to inflict injury on the infantry behind. By late 1917 British infantrymen had learnt, and were glad, to walk as close as twenty-five yards in the rear of a boiling, roaring cloud of explosive and dust, accepting that it was safer to court death from the barrage than to hang back and perhaps be killed by a German whom the shells had spared and one’s own tardiness allowed the time to pop up from his dug-out. In July 1916, however, few gunners knew how to make a barrage ‘creep’ at a regular walking pace across a piece of enemy-held territory and, prudently, few infantrymen would risk approaching too close to a barrage line until they saw it lift and move to the next target. The consequence was that the advance, even when it worked to plan, took the form of a series of discontinuous and quite literally breathless jerks forward, the lift of the barrage to the next objective being the signal for the waiting infantry to leave their positions of shelter and race the intervening two or three hundred yards to regain its protection. For the 18th and 30th Divisions, flanking the French at the extreme southern end of the battlefield, this programme worked very well, and both gained all their objectives within the limit of time set, though each at the loss of about three thousand casualties. They benefited, however, from their proximity to the French, whose gunnery, after two years of war, was much superior to the Royal Artillery’s, and whose infantry, here belonging to the XX Corps, were among the best soldiers on the western front. The British III Corps’ advance was, therefore, in the language of the period, to some extent a ‘sympathetic’ one.

Where, farther north, the British had to make their way

alone, most battalions, even if they managed to get into the German trenches, sooner or later ‘lost’ the barrage, which they had to watch grinding noisily and remorselessly away from them, according to a pre-arranged timetable, and could only very rarely and with the greatest difficulty recall to work over the objective on which they were stuck. The reasons for this ‘loss’ of the barrage were everywhere the same: the infantry arrived in the German front trench either too disorganized by losses to be able to push on at the time required, or else were held there so long by the resistance of the German defenders that the barrage left without them, or else, exhausted by physical effort and nervous strain more quickly than the staff had allowed for, stopped to rest.

Exhaustion was what stopped the advance on the northern sector of the 21st Division’s front, after a very brave and quick rush had carried the two leading battalions of the 64th Brigade deep into the German position. Despite heavy losses from machine-gun fire in no-man’s-land, the 9th and 10th King’s Own Yorkshire Light Infantry crossed it, found good gaps in the German wire, shot or bombed the defenders who opposed them and took the front trench. Joined there by their support battalions, the 15th Durham Light Infantry and the 1st East Yorkshire, they moved on behind the barrage to the next German trench, from which they extracted and sent back about two hundred German prisoners. All this had taken about ten minutes, during which half of the soldiers and most of the officers had been killed or wounded. The barrage now moved forward, and the battalions were still able to follow, but they now came across more and more Germans, hidden in shell-holes or bits of trench, who threw bombs or opened fire with their rifles. At the end of half an hour from zero, by which time they had covered a mile of ground from their own front line, the Yorkshiremen reached an old sunken road. Here the majority stopped—‘a general halt was called’, is the euphemism employed by the official historian—though some parties from all four battalions went on a little farther, to Crucifix Trench, the brigade’s first objective. Five hundred yards ahead, Germans had begun to fire machine-guns from positions hidden in woodland and now ‘the barrage had passed on’. The 9th and 10th K.O.Y.L.I.’s advance was over for the day, the men too

worn out by fatigue and fear to go any farther themselves, the officers who might have led them dead or wounded. After a long delay, news of the circumstances reached those 'L.O.O.B.' – Left Out of Battle to form a cadre if losses were very heavy – and one of the officers, a young captain, Basil Liddell Hart, went forward through German machine-gun fire to take command. He remained with survivors throughout the afternoon, while men were killed and wounded in a succession of British attacks and German counter-attacks. At nightfall they were withdrawn.

On the 8th Division's front, it was disorganization that caused the British battalions to lose the barrage. The German artillery opposite was unsubdued and put down a heavy fire into no-man's-land as soon as the infantry reached to within eighty yards of the wire. They had already suffered from long-range machine-gun fire during the process of scaling the British parapet, filing out through the gaps in their entanglements, forming up into waves (each battalion was in four waves at fifty paces distance), and marching across no-man's-land, here, in places, eight hundred yards wide. Under the lash of the German barrage, the British infantry broke formation and rushed the wire. At several spots the survivors got into the German front trench and even beyond it. But most of their officers had gone down and the groups of attackers were small and separated from each other. Guessing at their circumstances, one of the commanding officers, Lieutenant-Colonel Bastard of the 2nd Lincolns, crossed no-man's-land alone from the British side, collected his scattered soldiers and those of a neighbouring battalion and organized a stretch of the captured trench for defence. The British barrage, which might have helped him in this, was now far ahead, playing on positions which the British had no hope of reaching, let alone taking, and it was not until 9.15 a.m., nearly two hours after zero, that the matter of recalling it was even discussed between the divisional commander and his brigadiers. They then told him that there could be no question of renewing the attack with their broken brigades and that to put down a barrage again on the German front line might kill more friends than enemies. So there things were left. Bastard and his handful eventually withdrew.

The most frustrating circumstances in which to lose the barrage were those experienced by battalions which got more or less intact into the German lines but there encountered such resolute resistance that they were unable to leave on schedule for the next objective. Typical of such an experience, though such experiences were rare on July 1st, was that of the London Scottish. Part of the 56th London Division, which had been given the diversionary role of attacking the Gommecourt salient to the north of Fourth Army's front, the London Scottish was one of the most famous Territorial and best of all battalions in the B.E.F. First of the Territorial infantry to land in France, it had fought at the First Battle of Ypres in 1914, Givenchy, Festubert and Loos in 1915 and had been in line opposite the Gommecourt salient since early May. Gommecourt was an exceptionally strong sector of the trench-line, where the terrain favoured the defenders, who had done much over the years to improve on it, and was garrisoned by an excellent German division, the 2nd Guard Reserve. German batteries were numerous, the fire of those of the attacked divisions being supplemented by that of batteries still farther to the north, beyond the limit of the British offensive. Yet the London Scottish, together with the other London Territorials, Queen Victoria's Rifles, the Queen's Westminster Rifles, the Rangers, the London Rifle Brigade, were confident of their ability to get into the German position and secure it.

Their confidence was justified. The barrage plan allotted them half an hour to clear their objectives and join hands with the 46th North Midland Division's leaders, who were to attack concentrically. Leaving their trenches behind a smoke screen at 7.30 a.m., the London Scottish were at once caught by a severe standing barrage in no-man's-land, but pressed on and, though several officers lost direction in the smoke and led their men to the wrong sector of trench, got almost everywhere into the German front line. In several places the Germans had abandoned it, probably deliberately, at the Scots' approach, so there and elsewhere they were able to press on quickly to the German second trench. On the right, one of the companies was able to reach and overpass its objective, retiring when it discovered its mistake. On the left, D Company had met heavier resistance all along and could not reach its final

objective, a fourth trench line beyond the three it had already captured. The time was now 8 a.m. and the divisional artillery shifted its fire, as the timetable required, to the expected point of junction with the 46th Division, far away on the London Scots' left. That left them to their own devices. Worse, they were now physically isolated for the German standing barrage did not move, continuing to rain down a curtain of shells in no-man's-land all morning and afternoon, preventing the movement of essential supplies from the British to the captured German trenches.

A fresh supply of ammunition and bombs, particularly bombs, were what quickly became essential to the Scots. For in their isolation they were subjected to a series of counter-attacks by the Germans, who now surrounded them on three sides. These counter attacks provide an excellent example of what trench fighting in the First World War was like and why it took the form it did.

The weight of fire overhead, from both field-guns and machine-guns, kept attackers and defenders alike in the trenches. The trenches, nevertheless, gave them access to each other, being part of a continuous system or grid, fire trenches running in one direction, communication trenches athwart them in another. The two sides, however, would rarely see each other, because both fire and communication trenches were 'traversed'—dug in angular kinks to deny an attacker the chance of firing down the whole length of the trench and to localize the blast of any shell which fell into it. In these circumstances, friend and foe could approach very close without being able, though aware of each other's presence, to do each other much harm in the conventional way. An impasse could result—to be resolved sometimes by an individual or group on one side or the other deciding to 'go out over the top' or 'go above ground'. Sergeant Gurney of D Company was killed doing that during the initial advance, jumping up the side of the trench to get at some Germans who were holding up the attack round a corner. The normal method of resolving the impasse, however, was by 'bombing', the throwing of a hand-grenade over the top of the traverse, and running round to arrive just after it exploded. If played seriously, it was an extremely dangerous game, for one could run into the explosion

of one's own grenade, or into the fire of an unwounded enemy soldier, or into the grenade of someone bombing from the next traverse up. Equally, it could be nearly a sham combat, with the two sides sticking prudently to their own traverses and the grenades falling harmlessly in the bay between them. Here in the trenches which the London Scottish had captured it became something else: a static attritional affair, the Scots having blown in several sections of trench around them, using explosives brought by accompanying Royal Engineers, and so having enclosed themselves in an earthwork stockade. Inside it they ought to have been secure and could have expected eventually to have the section of trench they had captured incorporated in the British system on the other side of no-man's-land by new digging. Several circumstances militated against this outcome: they were overlooked from three sides; the trenches had been so knocked about by the British bombardment that the occupants were exposed to fire in many places; the Germans had artillery available to bombard them from close range, and fresh infantry to deliver counter-attacks; the barrage in no-man's-land prevented either supplies or reinforcements from crossing. On the far side, the London Scots' commanding officer, who had been Left Out of Battle, became aware of his companies' plight, and got together a relief party. It set off in three groups between 9 and 10 a.m., each burdened with bandoliers of ammunition and boxes of bombs. Only three of the fifty-nine who started got through, and though this does not mean that all the rest were hit, some presumably deciding to take shelter in shell-holes, the figures do testify to the weight of fire which the Germans were laying on and over the London Scots' position. Two of the four company commanders were by then out of action and, soon after 2 p.m. a third was killed. The burden of managing the defence now fell wholly upon the fourth, Captain Sparks. 'The better to direct the fighting, he was often seen standing and moving on the unbroken ground between the trenches'—conduct which would have attracted admiration at Waterloo and, when displayed on a First World War battlefield, beggars powers of eulogy. His men, though less exposed, were steadily being wounded or killed by bomb-blast or sniping shots, and though his garrison was occasionally reinforced by refugees from even harder pressed battalions on

his left flank – the Rangers, Kensingtons and Queen Victoria's – it was dwindling in strength. The men who were left were running out of ammunition fast and, like defenders of some imperial fortlet on the veldt or the Frontier, kept their rifles going throughout the hot afternoon with rounds extracted from the pouches of the casualties. By 4 p.m. Captain Sparks recognized that his tiny force, now under attack by thirteen German infantry companies from three different regiments, was about to go under. He sent the following message back across no-man's-land: 'I am faced with this position. I have collected all bombs and [cartridges] from casualties. Every one has been used. I am faced with three alternatives: (a) to stay here with such of my men as are alive and be killed. (b) to surrender to the enemy (c) to withdraw such of my men as I can. Either of these first two alternatives is distasteful to me. I propose to adopt the latter.' Using discarded German rifles and ammunition, he and four N.C.O.s made a final stand in the German front trench while the other survivors escaped into no-man's-land. There most of them, including Sparks, hid until darkness fell and allowed them to regain the British lines. During the day, the London Scottish, which had numbered 856 at dawn, had been reduced by death or wounds to 266.

The View from across No-man's-land

Such was one result, duplicated at thirty or forty other points up and down the Somme battlefield on the evening of July 1st, of trusting in the power of contemporary artillery to destroy an enemy position and 'shoot the infantry through' its ruins. The four forms of failure just examined do not exhaust the list of mishaps consequent on such an undertaking. The Ulster Division failed to carry its final objective, after a very rapid advance to its first, because the British barrage actually held it up, so allowing the Germans time to man with reinforcements brought from the rear positions which the Ulstermen would otherwise have found empty. Understandably, therefore, the Ulster Division counted July 1st a victory and the date, which also happens to coincide with the anniversary of the Battle

of the Boyne (Old Style), is observed by the Protestants of the province as one of their holy days. Again, some battalions' attacks failed because their supports could not or would not follow the trail they had blazed into the German positions, so leaving them cut off deep within the enemy lines. This seems to have been the fate of some of the 12th York and Lancasters, whose graves were found on November 13th, at the very end of the battle, when the village of Serre, one of the uncaptured first-day objectives, at last fell into British hands. Many battalions of the second wave failed to make their attacks work because, arriving in the German trenches, they became so intermingled with the survivors of a battalion which had gone over before them that they lost order and cohesion themselves. But some battalions, one should not forget, succeeded. The 7th Division took some, the 18th most, the 30th all its first objectives, and battalions of the 21st and 34th secured sizeable sections of the German trenches opposite their own. The French, better-trained, more experienced and with much more heavy artillery, had taken all their first-day objectives, and would have gone on if the plan had provided for unexpected success. The first day of the Somme had not been a complete military failure.

But it had been a human tragedy. The Germans, with about sixty battalions on the British Somme front, though about forty in the line, say about thirty-five thousand soldiers, had had killed or wounded about six thousand. Bad enough; but it was in the enormous disparity between their losses and the British that the weight of the tragedy lies: the German 180th Regiment lost 280 men on July 1st out of about three thousand; attacking it, the British 8th Division lost 5,121 out of twelve thousand. In all the British had lost about sixty thousand, of whom twenty-one thousand had been killed, most in the first hour of the attack, perhaps the first minutes. 'The trenches', wrote Robert Kee fifty years later, 'were the concentration camps of the First World War'; and though the analogy is what an academic reviewer would call unhistorical, there is something Treblinka-like about almost all accounts of July 1st, about those long docile lines of young men, shoddily uniformed, heavily burdened, numbered about their necks, plodding forward across a featureless landscape to their own extermination

inside the barbed wire. Accounts of the Somme produce in readers and audiences much the same range of emotions as do descriptions of the running of Auschwitz—guilty fascination, incredulity, horror, disgust, pity and anger—and not only from the pacific and tender-hearted; not only from the military historian, on whom, as he recounts the extinction of this brave effort or that, falls an awful lethargy, his typewriter keys tapping leadenly on the paper to drive the lines of print, like the waves of a Kitchener battalion failing to take its objective, more and more slowly towards the foot of the page; but also from professional soldiers. Anger is the response which the story of the Somme most commonly evokes among professionals. Why did the commanders not do something about it? Why did they let the attack go on? Why did they not stop one battalion following in the wake of another to join it in death?

Some battalions were stopped. On the northern face of the Gommecourt salient, where the 46th North Midland Division's attack had failed completely with heavy loss in the morning, one of the brigade commanders, Brigadier-General H. B. Williams, who had seen the 1/6th North Staffordshire and 1/6th South Staffordshire massacred shortly after zero, declined to send forward their sister battalions, the 1/5th North Staffords and the 1/5th South Staffords, later in the afternoon. The whole of the 10th and 12th Brigades, in 4th Division, were held back from a pointless renewal of the attack north of Beaumont Hamel about the same time, and in the evening General de Lisle, commanding the 29th Division, countermanded orders for the 1/4th and 1/5th King's Own Yorkshire Light Infantry, which had been brought forward from X Corps' reserve, to make a further attempt on the corpse-strewn slopes of Thiepval. There were other reprieves, but the majority of battalions scheduled to attack did so, no matter what had happened to those which had preceded them. There are a number of ways of explaining why this should have been so. Normal military sense of commitment to a plan was one reason, the spirit of contemporary generalship, schooled to believe in the inevitability of heavy casualties another, the mood of self-sacrifice which had the Kitchener armies in its grip a third. But most important of all was the simple ignorance of what was happening which prevailed almost everywhere

on the British side of no-man's-land throughout most of the day.

Even sixty years later, it is very difficult to discover much that is precise, detailed and human about the fate of a great number of the battalions of the Fourth Army on July 1st. Many of the London Territorial regiments, with a strong and long-established sense of identity, a middle-class character, and personal connections with metropolitan journalism and publishing, produced after the war excellent regimental histories in which the official chronicle is supplemented and illuminated by a great deal of personal reminiscence from literate and articulate survivors. The regular battalions of the Guards and the regiments of the line added copiously to their existing histories. But, as we have seen, the Somme was predominantly a battle of humbler and more transient groups than these, over which the regular army had temporarily cast the cloak of its identity, but which at the peace vanished from public memory almost as quickly as they had been conjured into existence. It was not a deliberate act of obscurity. The regular regiments which had raised the greatest number of 'Service' battalions were often the least affluent (the rough rule of thumb in calculating the social status of an English regiment is that the farther from London its depot, the less fashionable will it be, and the less monied its officers) and the least able therefore to stand the expense of printing a really exhaustive history. There was moreover a difficulty about sources. The principal source of a unit's history is the War Diary, which the intelligence officer is supposed to write up daily. When he is an amateur its contents tend always to be sketchy, and when action is intense and casualties heavy it may run for days in arrears, later to be written up for form's sake from a single, sometimes second-hand memory of events. All these caveats apply to the War Diaries of July 1st. Consequent uncertainty about the experience of particular Kitchener battalions has added an extra poignancy to their collective story. The uncertainties might have remained forever undiscovered. At the very last moment, however, a Lincolnshire farmer, Martin Middlebrook, in whom a chance visit to the war cemeteries of the Somme in the late nineteen-sixties aroused an obsessive curiosity about the nature and fate of the

Kitchener armies, embarked on a quest to discover survivors of July 1st, and in a truly heroic effort of historical fieldwork, found and interviewed 546 of them, by then, with the exception of a few enlisted under age, men of seventy or over.

The book which he made from his interviews is a remarkable achievement, comparable with Siborne's history of Waterloo, constructed on the same basis, and certainly fit to stand beside it, as well as being a great deal more readable.* But whereas Siborne addressed his inquiries to all surviving officers, and from their replies was able to piece together a meaningful account of the battle, Middlebrook's answers came, of course, only from the junior ranks whose view was a very local one and which collectively depict almost indecipherable chaos. We have already seen what Siborne's correspondents had to say about the limitations which the circumstances of battle imposed on the grasp of the passage of events. What Middlebrook's evidence emphasizes is the extent to which a hundred years of technological change had further reduced the range of effective vision on the battlefield, particularly in those not familiar with the realities of war. 'On my left,' wrote a private of the 1/8th Royal Warwicks, of the scene at zero hour, 'I could see large shell bursts as the West Yorks advanced and saw many men falling forward. I thought at first they were looking for nose-caps (a favourite souvenir) and it was some time before I realised they were hit.' On the far side of no-man's-land, 'I found the German wire well cut,' wrote a private of the 4th Tyneside Scottish, 'but only three of our company got past there. There was my lieutenant, a sergeant and myself. The rest seemed to have been hit in no-man's-land ... the officer said, "God, God, where's the rest of the boys?"' Private Tomlinson, of the 1/7th Sherwood Foresters, accompanied his commanding officer across no-man's-land, who had gone to find out for himself what was happening to his battalion. 'When we got to the German wire I was absolutely amazed to see it intact, after what we had been told. The colonel and I took cover behind a small bank but after a bit the colonel raised himself on his hands and knees to see better. Immediately he was hit on the forehead by a single bullet.'

With a view of events so hard and dangerous to come by at

* *The First Day on the Somme* by Martin Middlebrook.

close quarters with the enemy, it is to be taken for granted that in the British lines a composite picture of the battle was even more difficult to piece together. Rowland Feilding, a Coldstream Guardsman who had come up to observe the battle from a point opposite Mametz, wrote to his wife, 'the sight was inspiring and magnificent. From right to left, but particularly opposite the French ... the whole horizon seemed to be on fire, the bursting shells blending with smoke from the burning villages ... this is a district of long views. Never was there a field better suited for watching military operations.' But Feilding was there as a sight-seer, seeking sensation, not precise information. A sight-seer with a more professionally inquisitive motive, J. F. C. Fuller, found on arrival 'an intense bombardment ... in full swing, and so much dust and smoke [covering] the Gommecourt salient that it was difficult to see anything clearly. At five minutes to zero a somewhat scattered smoke barrage was put down, then came the attack across no-man's-land. I cannot say that I saw it. All I can vouch for is that a little later on through my glasses I did see several groups of men, presumably of the 139 Brigade, moving towards Pigeon Wood.' A commanding officer on the Gommecourt sector, almost under Fuller's eyes, Colonel Dickens, of Queen Victoria's Rifles, saw even less than he did: 'For two hours after zero, no news whatsoever was received from the front,' (which was only about a thousand yards distant) 'all communications, visual and telephonic having failed. Beyond answering appeals from the Brigade' (next headquarters upward) 'for information, we had leisure to observe what was going on.' But he learnt nothing until, after nine o'clock, he was visited by 'two plucky runners who [had] returned to our line through the barrage'.

Why should he have had to depend on runners? The reason is simple to explain. The communication system in Fourth Army, resembling in essentials that installed up and down the Western Front and on both sides of no-man's-land, was a comprehensive one. It was based on the telephone and the telegraph, the latter replacing the former where amplification was difficult to ensure, and ran through an extremely elaborate network of 'land line' and 'air line'. Air lines from the major headquarters—G.H.Q. at Montreuil and Fourth Army H.Q. at Querrieux, fifteen miles from the front—to Corps, and

Division, with as much lateral branching as was necessary to make communication to a flank possible. Forward of Division, to Brigade and Battalion, the lines left their poles to descend earthward, becoming 'land lines', by this stage of the war no longer strung vulnerably along the walls of the communication trenches, but buried under the duckboards on the floor. The nearer it approached the front trench, the deeper was it buried, until in the forward zone it reached a depth of six feet. The installation of this 'six-foot bury' had been one of the most time-consuming preparations for the offensive, but was justified by the security of communication it provided even under the heaviest enemy shellfire. It had, however, one disabling shortcoming: it stopped at the edge of no-man's-land. Once the troops left their trenches, as at 7.30 a.m. on July 1st, they passed beyond the carry of their signals system into the unknown. The army had provided them with some makeshifts to indicate their position: rockets, tin triangles sewn to the backs of their packs as air recognition symbols, lamps and flags, and some one-way signalling expedients, Morse shutters, semaphore flags and carrier pigeons; but none were to prove of real use on July 1st. Indeed, these items seem only to have further encumbered men already heavily laden, in a fashion more reminiscent of explorers setting off on an expedition than soldiers entering battle. The story of Scott's Last Expedition, news of which had magnetized the English-speaking world on the eve of the war, may have seemed, as it does in retrospect, of special significance to a reflective soldier of the Fourth Army as, bowed under the weight of rations and protective clothing, he prepared to leave base-camp for the dash to the final objective on the evening of June 30th; it has its parallels in the fate of the vanished party of the 12th York and Lancasters, whose bodies were discovered five months after the attack in the heart of the German position.

That a party could disappear so completely, not in the Antarctic wastes but at a point almost within visual range of their own lines, seems incomprehensible today, so attuned are we to thinking of wireless providing instant communication across the battlefield. But the cloud of unknowing which descended on a First World War battlefield at zero hour was accepted as one of its hazards by contemporary generals. Since

the middle of the nineteenth century, the width of battlefields had been extending so rapidly that no general could hope to be present, as Wellington had made himself, at each successive point of crisis; since the end of the century the range and volume of small-arms fire had been increasing to such an extent that no general could hope to survey, as Wellington had done, the line of battle from the front rank. The main work of the general, it had been accepted, had now to be done in his office, before the battle began; and indeed one of the pieces of military literature most talked of in the British army before the First World War was a short story, *A Sense of Proportion*, by General Sir Edward Swinton, which had as its central character a general—obviously based on the great Moltke—who, having made his dispositions on the eve of battle, spends its hours casting flies for trout, serene in the assurance—which the story's conclusion vindicates—that he had done all he could.

No British general spent July 1st fishing. But the spirit which informs the plans laid by the Fourth Army, whether those of a formation like XIII Corps (equivalent in size to Wellington's Waterloo army) which ran to thirty-one pages (Wellington issued no written plan for Waterloo), or of a unit like Queen Victoria's Rifles, a force of under a thousand men, which run to twenty numbered paragraphs, is essentially Swintonian. It is a spirit not of providing for eventualities, but rather of attempting to preordain the future; a spirit borne out by the language of the orders: 'infantry and machine-guns will be pushed forward at once ...'; 'the siege and heavy artillery will be advanced ...' 'After the capture of their final objective the 30th Division will be relieved by the 9th Division ...' Man's attempts at preordination are always risky and require as a minimum precondition for success the co-operation of all concerned. Upon that of the Germans the British could not of course count. Consequently, at every point where the future threatened to resist preordination, Haig and Rawlinson had reinsured themselves—by lengthening the duration of the bombardment, adding to the targets to be destroyed, increasing the ratio of troops to space.

The effect of these reinsurances was to complicate the plan. And the complication of a plan which would depend for its success on the smooth interaction of a very large number of

mutually dependent elements invited its frustration. Interaction requires articulation, to adopt the language with which J. F. C. Fuller was fond of obscuring military truths; which means that if major operations are to be carried through in the teeth of enemy resistance, commanders must at all times be able to talk to their troops, troops to their supporting artillery and so on. Such conversations were easily arranged while everyone was on the same side of no-man's-land. But once the infantry departed on their journey, conversation stopped, to be carried on, if at all, through the medium of the battalion runners, upon whose messages Colonel Dickens, for example, had to rely for news, two hours old, of the progress of his fighting companies.

Discontinuities of this order in the receipt of information, particularly when the information concerned difficulties or failure, made the management of a battle, in the tactile and instantaneous fashion open to Wellington at Waterloo, impossible. Commanders could not discover where the soldiers were: 'Observation of troops, on account of the smoke and dust, was extremely difficult, and although two contact patrol aeroplanes displayed amazing daring, flying along the front sometimes only fifty feet above the troops under heavy small-arms fire, no definite information could be obtained' (of the 4th Division in mid-morning); hard-pressed battalions could not ask their supporting batteries for fire support: the 14th Brigade, pinned down by heavy machine-gun fire from Thiepval at 8.45 a.m., could not get the promise of a barrage until 12.05 p.m.; carefully rehearsed soldiers failed to co-operate in changes of plan which events made necessary: 'a party (of the 56th Division) told off to carry concertina wire could not for some time be got to understand that they must drop their loads and help to form an attacking wave.' Throughout the morning and afternoon, Rawlinson, at Querrieux, and Haig, in his advanced headquarters at the Château de Beauquesne, ten miles to the north, attempted to follow the battle from scraps of imprecise information several hours old. Neither made real sense of it. Neither, very wisely, ordered any substantive changes of plan. Many of the gunners, whose fire, if properly directed, would have been so effective in saving British lives, also remained, though closer at hand, inactive spectators: 'On the whole',

wrote Neil Fraser Tytler of a Lancashire Territorial Field Brigade, 'we had a very delightful day, with nothing to do except send numerous reports through to Head Quarters and observe the stupendous spectacle before us. There was nothing to do as regards controlling my battery's fire, as the barrage orders had all been prepared beforehand.' Throughout this period, the only group of soldiers with precise information to offer of the whereabouts and circumstances of their units were the battalion runners. It is ironic to reflect that the taunt thrown into the faces of so many highly trained German Great General Staff officers, excluded by official policy from service in the trenches, by Hitler, ex-runner of the 16th Bavarian Reserve Regiment—that he knew more about the realities of war than they—had after all a coarse grain of truth to it.

The Wounded

Given that the high command spent most of July 1st in ignorance of how the Fourth Army was faring, its passivity is excusable; given its silence, the persistence of lower headquarters, too, in sticking to the plan is quite understandable. Nor were the military consequences of their inertia disastrous, not at least in the short term. For the Germans on the Somme were far too weak, in men, in artillery, in ancillary means, to have thought of snatching profit from the British army's disorganization by a quick counter-offensive. Looked at in these terms, therefore, the continuation of the attack throughout the day did not compound the military error. But it did multiply the scale and prolong the duration of the human suffering which the battle brought, by a factor difficult to quantify but certainly very large indeed. It caused many more men to be wounded than any sort of necessity required and left those wounded early on to agonize in no-man's-land throughout the day.

Waterloo wounds, when not instantly lethal, had had in many cases extremely unpleasant consequences, fatal septicaemia and peritonitis being the most obvious. But Waterloo wounds (cannon wounds apart) had been in general single and