

Battle Maps and Trench Maps used in the Third Battle of Ypres

This essay will look briefly at the relationship between the battle map and the trench map in reference to the Third Battle of Ypres, 7th June-10th November 1917. It will show that both types of maps had their uses and their failings.

Battlefields have been mapped for thousands of years but only by individual commanders and for their own battle tactics, these often lacked the specific details required for planning or troop movements. During the First World War, the need for detailed maps became ever-more important. The Royal Engineers Field Survey unit, seconded from the Ordnance Survey was posted to France and working in terrible conditions, produced highly detailed maps of trench systems in allied and enemy hands. The trench map became an invaluable tool for the army to plan and execute individual battles. By the end of the First World War, the Ordnance Survey had printed over twenty million maps for the war effort.¹

The “battle map” is a generic term for a geographical representation of data and strategy,² they overlap with the trench map but are not as detailed and are used for a specific battle. The battle map shows the objective for that battle, in the case of Figure A,³ the advance from Messines Ridge to the village of Passchendaele. Figure A is a tidier version of a battle map showing positions post battle with individual land gains along with the dates on which that land was captured. Many battle maps, though not this one, show allied troop positions, which units will attack which segment of the front line. The plan for the Third Battle of Ypres was to break the stalemate along the Ypres Salient. The allies had been stuck on the Salient since 1914, the two previous battles in the October of 1914 and the April of 1915 had resulted in land losses, leaving the channel ports and allied supply lines vulnerable. The battle map is ever changing, showing the ebb and flow of battle as lands are lost or gained, these are then fed into the trench map. What a battle map does not show can be more interesting than what it does. It does not show that activities of the fledgling Royal Flying Corp and their operations above the battlefield. Initially used for observations of enemy positions including troop and equipment numbers; and later for bombing raids over enemy lines.⁴ The Royal Engineers Field Survey unit also used aircraft to map trench positions for the trench map.⁵ The battle map does not show weather conditions. The Third Battle of Ypres is infamous for the terrible conditions in which it was fought. At its beginning in the June of 1917, the weather was glorious, Messines Ridge was taken in the heat of a Belgian summer. At the start of the Battle of Pilckem, 31st July 1917, the heavens opened and Belgium suffered its wettest autumn in eighty years.⁶ The rains did not stop for any great

¹ WWW.Ordnancesurvey.co.uk/about/history visited 26/11/25

² WWW.Google.co.uk visited 23/11/25

³ WWW.Britannica.com/event/Battle-of-Passchendeale visited 7/11/25

⁴ WWW.NAM.ac.uk/explore/first-world-war visited 26/11/25

⁵ WWW.Ordnancesurvey.co.uk visited 26/11/25

⁶ Liddell Hart *History of the First World War* Pan Books. London 1972. p.330

length of time, and subsequent battles were fought with troops of both sides up to their waists in mud.⁷ By August the 17th, the conditions were so bad that General Gough, Officer Commanding Fifth Army, is trying to persuade General Haig, Commander-in-Chief British Army that any further battles needed to be postponed until the weather improves.⁸ Haig was adamant they continue. For two the next two month both sides are viciously attacking each other and being attacked themselves by the weather. Battle maps do not show the human cost of the battle. It does not show that a total of half a million men were killed or wounded, with many drowning in the sea of mud. The battle map does not show the complete destruction of Ypres and the surrounding villages. By the end of 1917, the last building to remain standing in the once thriving town of Ypres, was a section of the Cloth Hall tower. The woods shown on the map, Sanctuary, Polygon, Pilckem, are nothing more than stumps, offering no shelter to either side. Lastly, the battle map does not show real-time troop movements, the terrain of battle, the shell holes, communication trenches, gas filled pockets to be avoided, nor the psychological damage of battle. It should also be noted that these are also missing from the trench map.

The “trench map” is a larger, more detailed version of the battle map, these were produced in scales that the reader will recognise. Different map scales were used for different purposes; the 1:10000 a very detailed map for the infantry, 1:20000 for the artillery, and 1:40000 used for planning and administrative purposes. The battle map for the Third Battle of Ypres is 1:5000, this scale was used for specific battles and operations. The rarer 1:2500 was used for highly specific operations.⁹ The trench map showed the front line and communication trenches for both sides of the conflict, allied lines coloured blue, with enemy lines in red (this was reversed in 1918 to match the French maps). Each map gives details of gun emplacements, machine gun posts, mines, barbed wire entanglements, and observation posts, whilst also showing nearby landmarks such as villages, woods or farms. The British army had had military style maps of France and Belgium since the start of the 20th century, but as the Germans executed the Schlieffen Plan, the need for better mapping became apparent. The Belgian 1:40000 series was successfully enlarged to 1:20000 but the enlargement of the French 1:80000 to 1:20000 rendered the map useless as important details were lost in the process.¹⁰ The French and Belgians used different representative symbols, different ways of gathering the raw data, and used metric distance measurements, with the allies using imperial measurements. Areas behind the British lines were resurveyed from 1914 using the triangulation method as well as aerial photography to map the German positions. Rapid improvements to data gathering were made during the conflict, including the “flash-spotting and sound ranging” method for mapping enemy gun positions. This method meant observing the gun flashes and the direction of counter fire, the location of the gun was measured by timing the interval between the flash being seen and the sound of the gun firing. Accurate locations were important to the artillery to ensure that bombardments were hitting their target and not “dropping short” on their own men. As the maps were updated, the date of revision was included in the upper

⁷ Lyn MacDonald *They Called it Passchendaele* Penguin Books. London 1993. p.123

⁸ Ibid p.152-3

⁹ WWW.nls.uk/ww1/trenches/info1. Visited 28/11/25

¹⁰ Ibid

margin, ensuring that the most up-to-date map was being used. The trench map continued to be used until the end of the war. The German Spring Offensive in 1918 pushed the front line over sixty miles westward towards the French coast, and the allied counter offensive in the summer pushing the line back eastwards. The rapid land losses and gains needed to be mapped in readiness for subsequent battles.¹¹

One of the more interesting aspects of the trench map is that they show the names given to the trenches. It was not just the soldier on the ground that named the trenches, the General Staff did, as did the cartographer who made the map. It was not just the British who named their trenches, the French, Belgians, and the Germans did likewise.¹² Naming allows everyone, from the Commander-in-Chief to those on the front lines, to know the exact location being discussed. Keeping to the official map reference allowed for mistakes and confusion but ordering a unit to consolidate “French Trench” made more sense. A “trench” was either a front line, second line or reserve line trench, occasionally front-line trenches were “streets” or “roads”. An “avenue” was a major route between the front line and a communication trench, “alleys” and “lanes” were lines between communication trenches.¹³ Names associated with the Third Battle of Ypres include “Hellfire Corner”, “Shrapnel Corner”, and “Dead End”. These positions were under constant shelling from the Germans. Individual trench names were erased during the battle due to continuous shelling. The bad weather and flooding did not lend itself to trench warfare, any names surviving had been given in the earlier battles. The names of nearby farms were used for battle locations, “Rat Farm”, “Spree Farm”, “Borry Farm” to name three. The weather conditions did not allow for the digging of communication trenches, duckboard tracks, plank roads, or light railways were used instead, these were also named, such as “Hunter’s Trail” or “Plumer’s Drive”.¹⁴ Naming gave a sense of belonging, of purpose, of trying to make a place more bearable, or, in the case of “Hellfire Corner”, letting the soldier know exactly what to expect.

Trench maps and battle maps are fascinating documents allowing the historian to follow the advances and retreats of battle. When used with supporting accounts of the battle, a full and rounded picture of what happened and potentially why it happened can be seen. The availability of the maps in publications and battlefield guides allows the descendants of those who fought to follow in their footsteps, see where they fought, where they fell, or where they are buried. Whilst the military still have a need for the battle map, the trench map has been consigned to history as later conflicts do not rely on a trench system to fight.

This essay has shown the difference between the battle map and the trench map, how and why they are used, the information they show and the information they do not.

¹¹ WWW.NLS.uk visited 28/11/25

¹² Peter Chasseaud *Rats Alley, Trench Names of the Western Front 1914-1918* Spellmount Ltd 2006. p.21

¹³ Ibid p.21

¹⁴ Ibid pp.106-107

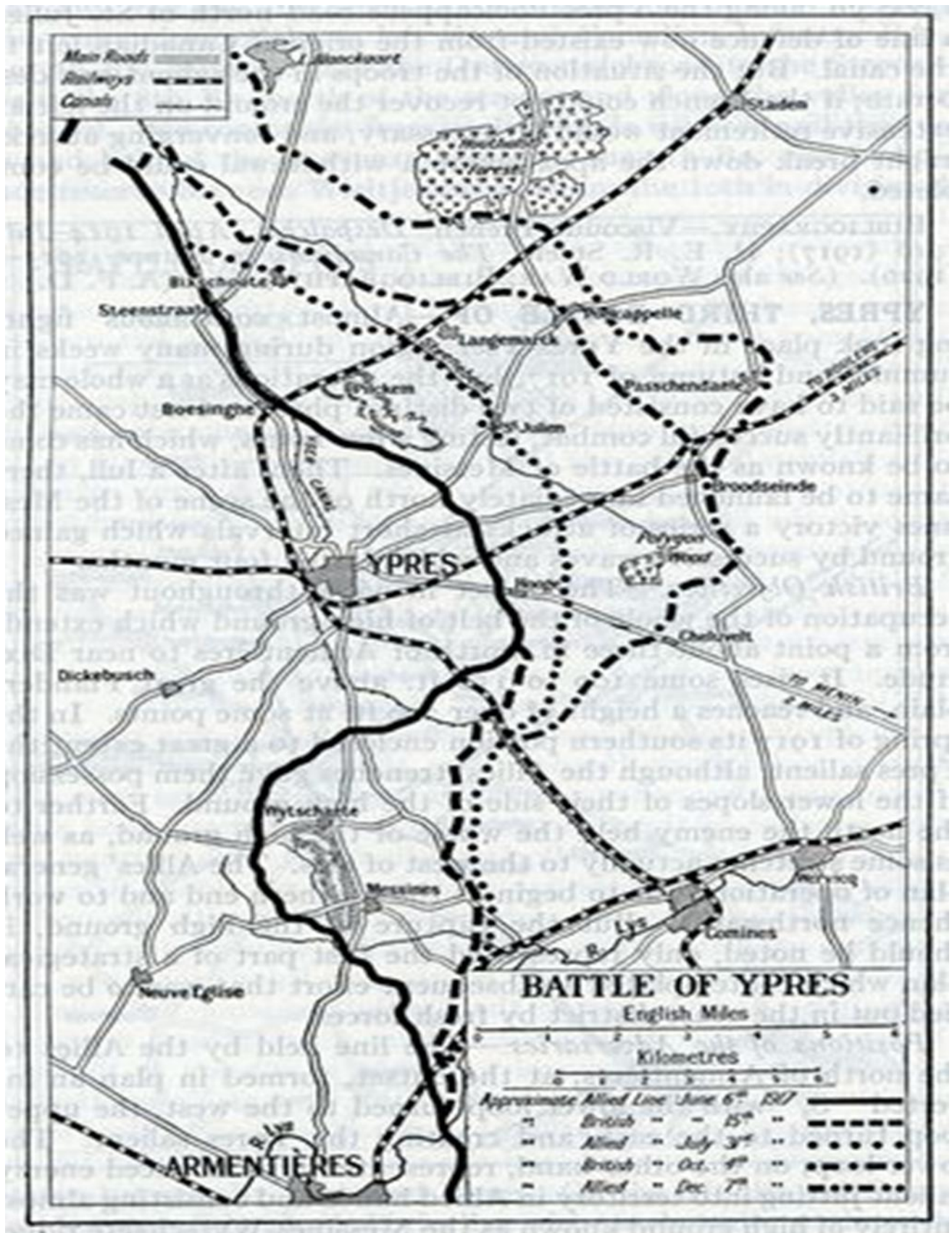


Figure A: The Third Battle of Ypres 7th June-10th November 1917

Bibliography

Britannica.com/event/Battle-of-Passchendaele. Visited 7/11/25

Chasseaud, Peter: *Rats Alley* (Stroud: Spellmount Ltd, 2006)

Google.co.uk search for difference between battle and trench maps. Visited 23/11/25

Greatwar.co.uk/research/maps/British-army-WW1-trench-maps. Visited 23/11/25

Haig, Sir Douglas: *War Diaries and Letters 1914-1918* ed Gary Sheffield and John Bourne (London: Orian Books Ltd, 2006)

Hart, Linnell: *History of the First World War* (London: Pan Books Ltd, 1972)

Holt, Maj and Mrs: *Battlefield Tours, The Western Front-North* (Barnsley: Pen and Sword Books Ltd, 2004)

Imperial War Museum: *IWM.org.uk/history/what-you-need-to-know-about-the-third Battle-of-Ypres-Passchendaele*. Visited 7/11/25

MacDonald, Lyn: *They Called it Passchendaele* (London: Penguin Books, 1993)

National Army Museum: *nam.ac.uk/explore/first-world-war*. Visited 26/11/25

National Library of Scotland: *maps-nls.uk/trenches/info1*. Visited 23/11/25

Ordnancesurvey.co.uk/about/history. Visited 23/11/25