

On maps and manoeuvres: the challenge of mapping Waterloo

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On Maps and Manoeuvres: the challenge of mapping Waterloo

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ABSTRACT

This paper looks at the historical inertia which builds once a description of a battle has been put on paper and how that leads to that description being accepted unquestioningly and passed down from historian to historian, unaltered, without ever being touched by original research. By using original documents, this article uses an example from possibly the best documented battle of all times: Waterloo. This example shows how difficult it is to replicate a battle in a map. It also shows how, in some circumstance, the published maps are misleading rather than informative.

Wellington once said, 'All the business of war, and indeed all the business of life, is to endeavour to find out what you don't know by what you do; that's what I called "guessing what was at the other side of the hill"'.¹ Military historians describe battles using evidence from archives, diaries and private records: finding out what they do not know from what they do. Understanding the findings can sometimes be difficult, especially for some spatially unaware readers. Describing the deployment of troops can be much more easily done with a picture: a map.

There is always a fascination with maps, especially those found in military history books. Maps are collectible and are frequently cut from books to be

¹ Statement by the Duke of Wellington in conversation with John Crocker and Crocker's wife (4th September 1852), as quoted in *The Croker Papers: The Correspondence and Diaries of the Late Right Honourable John Wilson Croker, LL.Dm F.R.S, Secretary of the Admiralty from 1809 to 1830* (London: John Murray, 1884), edited by Louis J. Jennings, vol.III, p. 276.

framed and hung on a wall. They describe in simple graphics the sweep of strategy and the battlefield, and show armchair generals the mistakes of their less fortunate, saddle-bound colleagues. However, it appears there are variations between both the quality and accuracy of some maps and descriptions of battles. This essay is intended to draw the reader's attention to the difficulties of mapping battles and, rather than suggesting a remedy, to demonstrate the problems inherent in trying to freeze what is essentially a dynamic event.

There seems to be a great deal of historical inertia once a description of a battle has been put on paper which leads to that description being accepted unquestioningly and passed down from historian to historian, unaltered, without ever being touched by original research. 'The visual images they offer are influential in creating and sustaining notions of historical situations ...'² The recent anniversaries of Waterloo and First World War battles has brought this problem into focus. Technological advances in archaeological surveying have also contributed. The Battle of Bosworth, confidently located for several centuries at Ambion Hill, is, based on recent surveys, now believed to have been fought some two miles from this location.³

There are significant problems of interpretation whilst attempting to convey complex events in a simple, graphical form. Maps enable us to visualise broad, strategic movements, both the intended and actual. A good example is the comparison of maps in the recent book *The First World War: The War to End All Wars*. The Schlieffen Plan is contrasted with the actual advance of the German armies showing how the German armies ended up short of Paris rather than beyond it.⁴ However, the scale of these maps doesn't allow the detail of the individual battles to be shown. The detail involved in maps of battles can be useful and informative, or distracting and misleading.

² Jeremy Black, *Maps and History: Constructing Images of the Past* (London: Yale University Press, 1997), Preface.

³ Glenn Foard and Anne Curry, *Bosworth 1485: A Battlefield Rediscovered* (Oxford: Oxbow Books, 2013).

⁴ Peter Simkins, Geoffrey Jukes, and Michael Hickey, *The First World War: The War to End All Wars* (Oxford: Osprey Publishing, 2013), p. 39 & p. 51.

ON MAPS AND MANOEUVRES

Mistakes and omissions can influence how the readers understand a battle. In *Waterloo: Battle of Three Armies*, a map of the battle incorrectly shows Bijlandt's Dutch-Belgian brigade attacking D'Erlon's I Corps and the French Grand Battery, although the arrow indicating the attack is entitled 'Ponsonby's Charge, 2pm'.⁵ The long held position of Bijlandt's brigade on the forward slope at Waterloo is also challenged in Muilwijk's recent *Standing firm at Waterloo*⁶, and can clearly be seen as behind the crest of the ridge in a map in Craan's 1817 work *An Historical Account of the Battle of Waterloo*.⁷

Omission of topographical detail can help to make a map easier to interpret, but can also lead to vital aspects of a battle being misunderstood. Topographical features were key to the battles in and around Normandy in 1944, but in Keegan's *Six Armies in Normandy* these details are missing, leaving the reader poorly informed regarding why certain locations were of importance during the battles.⁸ The topographical detail of the Waterloo battlefield is almost entirely missing from the disposition maps in Hamilton-Williams' *Waterloo, New Perspectives*.⁹ This omission is surprising given the vital role the topography played during the battle.

Units fighting in a battle are represented in a variety of different ways, some of which may misrepresent their formation, size or location. For clarity, many maps show units as discrete blocks or squares, sometimes blobs. Although in many battles in many periods troops fought in close formation, in recent history troops are spread thinly across the battlefield,¹⁰ and thus difficult to locate accurately on a map. The representation of formations as clear blocks leads the viewer into believing that the unit represented actually

⁵ William Seymour, Eberhard Kaulbach, and Jacques Champagne, *Waterloo: Battle of Three Armies*, ed. Alun Jones Chalfont, (London: Sidgwick and Jackson, 1979), pp. 86-87.

⁶ Erwin Muilwijk, *Standing Firm at Waterloo*, (Sovereign House Books, 2015).

⁷ W. B. Craan, *An Historical Account of the Battle of Waterloo*, (Brussels: Parkin, 1817, translated by Captain Gore).

⁸ John Keegan, *Six Armies in Normandy*, (London: BCA, 1982), p. 222.

⁹ David Hamilton-Williams, *Waterloo: New Perspectives: The Great Battle Reappraised*, (London: Arms and Armour, 1993), pp. 64-65.

¹⁰ Gwynne Dyer, *War*, (Toronto: Random House Canada, 2004), p. 37.

adopted this formation and occupied the area shown. In many cases this is very misleading. For battles fought in close formation, such as Waterloo, the formation dictates how much space a unit occupied. In more recent battles, such as Goose Green in the Falklands, it can be extremely difficult to represent the location of all the troops involved, and their formation.¹¹

Case study

To illustrate the problem of creating accurate maps depicting events in a battle, this paper examines the representation of probably the most famous battle of all, and the most famous event in that battle. A number of studies have attempted to revise the history of Waterloo, in particular to diminish the influence of Siborne's history, or to argue for or against Prussian influence in the battle.¹² However, there are still discrepancies in the way the battle is described and mapped which detract from otherwise valuable work. The objective in this essay is not to become involved in that debate, but to focus on the way the battle is mapped, and in particular to analyse in fine detail one small aspect of the battle as an example – the attack of the Imperial Guard. The dramatic denouement of the battle has been argued over since just after the battle finished. Allied nationalities argue over their respective roles in the defeat of the Imperial Guard, and French authors write of reasons for their defeat.

Accounts of the battle with simple maps appeared within months of the battle. Published detailed maps of Waterloo appeared soon after when the engineer W. B. Craan, Government surveyor in South Brabant (now Belgium), published his *Historical Account of the Battle of Waterloo*.¹³ Many accounts of the battle appeared in Britain, Germany and the Low Countries throughout the 19th and 20th Centuries, very often including a series of maps showing the battle in its various stages. Famously, Siborne's maps which

¹¹ Mark Adkin, *Goose Green: A Battle Is Fought to Be Won*, (London: L. Cooper, 1992).

¹² Peter Hofschroëer, *Wellington's Smallest Victory: The Duke, the Model Maker, and the Secret of Waterloo*, (London: Faber and Faber, 2004); Hamilton-Williams, *Waterloo*; Mark Adkin, *The Waterloo Companion: The Complete Guide to History's Most Famous Land Battle* (London: Aurum Press, 2001).

¹³ Craan, *An Historical Account of the Battle of Waterloo*

ON MAPS AND MANOEUVRES

accompanied his history were lauded as well as criticised when they were first published. Wyld's maps were also very popular in the mid-19th Century.

Siborne has been held responsible for misrepresenting aspects of the campaign and battles of 1815, but Siborne cannot carry all the blame. Authors of all nationalities have used omission and alterations to reinforce their interpretation of the battle, even to the present day. For British historians, many of the accusations involve the omission of non-British troops, their location and actions during the battle, but there are many British accounts of the battle which record foreign troops and their actions, including Siborne. For other nationalities, it is an attempt to right the perceived wrongs of histories of the campaign. It still causes affront between nationalities that, as described by some, the Imperial Guard is defeated by the Foot Guards and the 52nd. But one does not need to search for intrigue, however popular it is and however many books it sells. Instead one should be looking for as accurate a view of the circumstances as possible. In most cases, this seems to define a path in the valley of common sense, between the frenzied hilltop voices of intrigue, conspiracy and disagreement.

Maps and mapping the battle

In order to map a battle, one must find out four factors;

1. The terrain and how it looked on the day of the battle
2. The troops involved and their numbers
3. The location of the troops
4. Their formation

Maps are very powerful tools for the military historian as they describe the deployment and shape of an army in a single image as well as the terrain or topography of the battlefield. They portray the thrusts and manoeuvres of the formations and show the grand tactical *pièce de résistance* with which one side defeats the other. But here one must take a pause. How has the mapmaker decided how the troops were deployed? How has the mapmaker concluded the size of the deployment? Blind acceptance of histories, and especially maps, describing battles serves to prolong the use of incorrect and misleading information.

In one instance the Duke of Wellington commented,

I have looked over the plan of the ground of the battle of Waterloo, which appears to me to be accurately drawn. It is very difficult for me to judge of the particular position of each body of the troops under my command, much less of the Prussian army, at any particular hour.¹⁴

Wellington, whilst he believes the topography to be correct, does not, and will not, commit himself to the positions and formations of the troops. He made several similar comments regarding the battle. Other officers and men made similar remarks about what they could and could not see and were quite open and honest about it. Lord Saltoun, writing to Siborne, comments that, 'As to any attack made at the time by the outward angle of the orchard of Hougoumont I could not from my position see or know anything about it.'¹⁵

The 3rd battalion, 1st Foot Guards has been chosen for this analysis as this unit is clearly identified on many of the maps, and has several accounts written by officers and men who served at Waterloo. The size, formation and deployment of this unit will be assessed. However, the analysis could be done equally with any unit of the Allied army, and the 3/1st Foot Guards have not been chosen for nationalistic or other political reasons.

Several books about Waterloo have been randomly selected to represent the broad spectrum of literature available in the UK, and the location of the 3/1st Foot Guards has been plotted from each author onto a copy of Siborne's map. The opposing Imperial Guard forces have also been located

¹⁴ Memorandum written in 1836, 2nd Duke of Wellington (ed.), *Supplementary Despatches and Memoranda of Field Marshal Arthur, Duke of Wellington, K.G.: Waterloo, the Campaign in France, and the Capitulation of Paris by a Military Convention with the Allied British and Prussian Armies, 1815*, vol. 10 (London: John Murray, 1863), p. 513.

¹⁵ H. T. Siborne, (ed.), *Waterloo Letters*, Napoleonic Library 25 (London: Greenhill Books/Mechanicsburg, PA, USA: Stackpole Books, 1993), p. 247. It takes a determinedly biased reading of Siborne and other historians to put together a conspiracy.

ON MAPS AND MANOEUVRES

from those same maps. It is possible to see the wide variation not only in location but in size and direction of movement (see Figure 1).

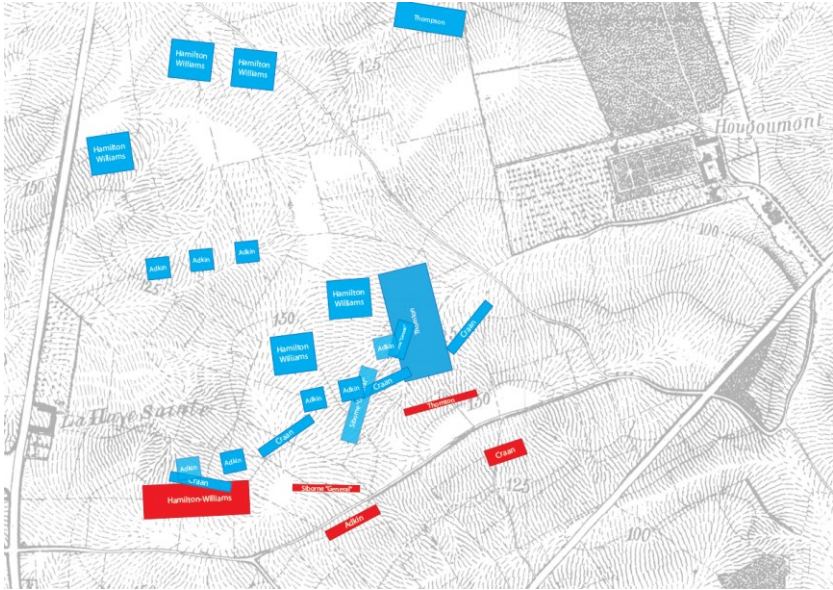


Figure 1: Locations and unit sizes of the 3/1st Foot Guards and Imperial Guard from different authors plotted on Siborne's map.

The terrain and mapping

Several of the maps showing the Battle of Waterloo do not represent the topography of the land very well, if at all. There is an enormous problem in the area to the west of La Haye Sainte; the Lion Mound, finished in 1826, used soil excavated from the battlefield, and this has changed the topography dramatically. The position of the mound does not help us in interpreting the final attack although it sits in a place which is identified by several historians as the location, at least in part, of the attack of the Imperial Guard.

To see how the battle has been represented, several maps from different publications can be studied. The first map under consideration is that by W.

B. Craan, published in 1817.¹⁶ The topographical detail is good, with the relief of the ridges shown with hachures of varying density. However, when considering the way the troops have been shown on the map, there is immediately a problem; the area taken up by each of the units in the respective armies is the same. As shown on this map, the 3/1st occupies a frontage of about 110 yards (see Figure 2, Item 7) and the regiments and battalions indicated would not all have been able to line up next to one another in the spaces provided by Craan.

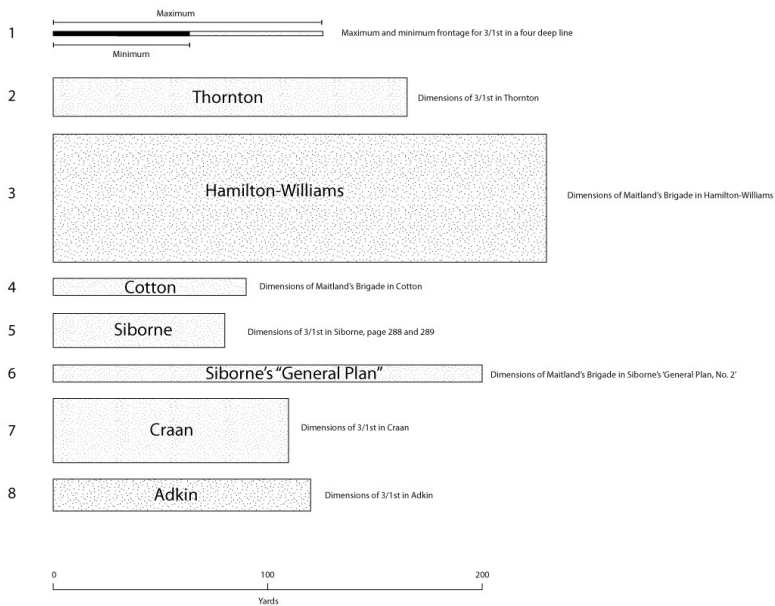


Figure 2: Unit sizes as shown on various maps

Siborne's maps are probably the most famous of the battle to have been published. Wellington was complimentary about the topographical detail of Siborne's maps but was reticent about confirming positions of troops on the maps (see above). Siborne shows two versions of the attack of the Imperial Guard; however they appear to contradict each other. The first shows the

¹⁶ Craan, *An Historical Account of the Battle of Waterloo*

movements of Adam's brigade.¹⁷ This shows the columns of the Imperial Guard approaching almost perpendicularly to the Brussels – Nivelles road. On the "Waterloo General Plan, No 2" the column is shown at about 30° to the Brussels – Nivelles road, and in a slightly different formation.¹⁸ In the second map Siborne shows the frontage of the 3/1st to be approximately 80 yards, but in the first map Maitland's entire brigade (made up of the 2/1st as well as the 3/1st) is shown with a combined frontage of 200 yards (see Figure 2, Items 5 and 6).

The map that accompanies Cotton's *A Voice from Waterloo* is generally more simplistic than the previous two, but shows the Imperial Guard attack in the same place as Siborne's "General Plan, No 2".¹⁹ The general arrangement of the units is similar to Siborne, but the frontages are certainly different, with Maitland's Brigade showing as only about 90 yards wide (see Figure 2, Item 4).

In *Waterloo, New Perspectives*, Hamilton-Williams shows the battle at 7:30pm (see Figure 2, Item 3).²⁰ Maitland's Brigade (the two battalions of the 1st Foot Guards) and Adams' Brigade (made up of three battalions and an extra two companies of the 3/95th) are shown as the same size, each brigade with a narrow frontage compared to its depth. This is clearly incorrect, and gives an enormously distorted picture of the troop deployments. Maitland's Brigade is shown as one block, and its frontage is shown as approximately 230 yards, with its depth as approximately 60 yards. Even in line four men deep, a battalion would be only three or four yards from front to back. Adam's Brigade in a continuous line had a frontage approximately two-thirds as big again as Maitland's. This makes a significant difference as to how the units fitted together before the attack of the Guard, and also how they manoeuvred during the attack. Hamilton-Williams also seems to completely neglect Colin Halkett's brigade, as it does not appear anywhere on the map.

¹⁷ Siborne, *Waterloo Letters*, pp. 288-289.

¹⁸ Siborne, *Waterloo Letters*, Maps included at the back of the volume.

¹⁹ Edward Cotton, *A Voice from Waterloo*, 3rd edition reprint; with a new introduction by Sir James Marshall-Cornwall, (Wakefield: EP Publishing, 1974).

²⁰ Hamilton-Williams, *Waterloo*, pp. 64-65.

There is an interesting comparison with the next two pairs of maps, both from the UK National Archives. Both of these are dated 1815, so can be clearly identified as pre-Siborne. The first of the pair is 'Sketch of the Ground & of the Battle of Waterloo - fought the 18th June 1815 by Capⁿ Thompson and Lieu^t Gilbert Royal Engineers'.²¹ In this map, the topography is sparse and somewhat inaccurate. The Imperial Guard is shown directly next to Hougoumont, and noted as, 'The French Columns of the Infantry of the Guard formed for the attack'. The second map, which appears to be derived from the first, is entitled, 'Sketch of the Battle of Waterloo fought on the 18th June 1815 between the Allied Army under the Command of His Grace The Duke of Wellington and that of the French led by Napoleon Buonaparte'.²² Apart from the orientation of the second map being 180° degrees to the first, the location of the Imperial Guard has been moved just to the West of La Belle Alliance. No serious attempt has been made in either map to accurately locate any other major units.

Equally interesting is the map entitled 'Battle of Waterloo Fought June 18th 1815 from a Sketch by Capt Thornton Dy A. Qr. Mr. Genl',²³ which is directly taken from a map prepared by the Royal Military Academy for the anniversary of the battle in 1834.²⁴ The topography of these maps is particularly good, showing the salient at the front of the left-centre of the allied line. Again, the prominent feature is that only one unit is clearly identified, this time, '3rd Batt. 1st Foot Guards with the flanks of their square wheeled up firing into a column of the Imperial Guard', with the Imperial Guard having advanced from just South of Hougoumont, as in the map by Thompson and Gilbert above.

Adkin in his *Waterloo Companion* shows good topographical detail using contour lines, something we are more familiar with from modern Ordnance Survey maps.²⁵ Adkin has broken the attack of the Imperial Guard into three phases and makes an effective attempt to show the apparent piecemeal nature of the attack. Importantly, as on the Craan map there is a definite

²¹ The National Archives (TNA), MPH 1/387/1

²² TNA, MPH 1/387/2

²³ TNA, WO 78/1006/25

²⁴ TNA, WO 78/1006/22

²⁵ Adkin, *The Waterloo Companion*, p. 392.

spur of land which protrudes from the allied line, between Hougomont and La Haye Sainte, out towards the French line. This spur is mentioned in several recollections of the Battle. Lieutenant G. Gawler mentions '...the tongue of ground which projects from the position, two or three hundred yards to the left of the position of the 52nd Regiment'.²⁶ He also recounts that, 'Maitland's and ... Halkett's Brigades were advanced, upon this tongue of ground ...'.²⁷ Adkin and Siborne both show this spur clearly on their maps. Many other historians have simply ignored its existence. Esposito and Elting's standard work shows the ridge as almost flat ground,²⁸ and Hamilton-Williams and Lachouque do not even bother to show the topography.²⁹ Adkin clearly shows the spur, and possibly also the effect it might have had in splitting the attack into two separate thrusts. This spur of land seems to have played a significant role during the final attack, and by its absence the viewer is left with inadequate information.

The troops involved

As we have seen, a question that many historians seem either to avoid or ignore is; exactly how much space did a unit take up during the battle? The strength of a unit deployed in battle and the formation of that unit define its frontage. It may be 1,000 men at the start of the battle, but by the end it might be down to 600 effectives. Is that reflected in the map? The reason for this avoidance is that it can be hard to calculate, and even harder to represent. But it is crucial to the correct interpretation and representation of a battle.

Identifying the number and formation of troops at any particular time in a battle can be extremely difficult, but crucial to the historian and mapmaker. In any battle there will be casualties, detached companies and troops, and the inevitable rogue sneaking off to avoid the fight. This makes assessing the strength, and therefore the frontage, of a unit extremely difficult. One can

²⁶ Siborne, *Waterloo Letters*, p. 291.

²⁷ Ibid.

²⁸ Vincent Joseph Esposito and United States Military Academy, *A Military History and Atlas of the Napoleonic Wars*, (New York: AMS Press, 1978), fig. p. 167.

²⁹ Hamilton-Williams, *Waterloo*, and Commandant Henry Lachouque, *Waterloo*, (London: Purnell Book Services Limited, 1972), p. 131.

make an informed guess, based on the action the unit is involved in and the casualties suffered. But in many battles, like Waterloo, some units were not engaged until the end of the battle, where others had been engaged all day, so extreme care needs to be taken in calculating the approximate strength, and any assumptions used in those calculations made clear to the reader.

It is essential to know the numbers of troops as accurately as possible for the units involved, as this then leads to an understanding of the amount of space the unit took up on the ground. This then provides the cues for the units' positions, which also depends heavily on their formation. It would be easy to conclude that the exact strength of a unit as it entered battle will never be known, and its strength during the fighting can certainly never be gauged with any accuracy. However, one is obliged to make an attempt at some sort of best estimate. This is not a guess, as it is based on figures available and known combat in which a unit was involved.

Several authors have published the establishment of units during the battle but there is disagreement between them. Bowden³⁰ has a single volume which deals with the army lists and strengths for the battle, but these disagree with those published by Cotton³¹, for example. All seem to disagree with the returns provided by the Adjutant General on the morning of Waterloo, and published in Gurwood³², and even these disagree with the individual unit returns held in the National Archives. Siborne, in his calculations, has included the "Sick, Absent" column in his totals, which gives a greater strength to those units which fought at Quatre Bras, and the lists are marked clearly in the Contents as being the, "Effective strength of the Anglo-Allied Army at the Battle of Waterloo."³³ Hamilton-Williams does not offer a solution to the problem in his book, and avoids putting a number to any unit in any of the army lists smaller than a Corps. He says, '... I have attempted to cull my figures from the most reliable – in my estimation –

³⁰ Scott Bowden, *Armies at Waterloo: A Detailed Analysis of the Armies That Fought History's Greatest Battle*, (Arlington, Tex.: Empire Games Press, 1983).

³¹ Cotton, *A Voice from Waterloo*, p. 233.

³² John Gurwood, ed., *The Dispatches of Field Marshal The Duke Of Wellington*, vol. 12 (London: John Murray, 1838), pp. 486-487.

³³ H. T. Siborne, *The Waterloo Campaign*, 4th ed. (Birmingham: Edward Arber, 1894), p. 48.

archival sources available'.³⁴ However, he does not inform the reader which ones they are, so judgement must be suspended. Hamilton-Williams derides those who have attempted to calculate unit sizes, and dismisses Bowden as making, '... much use of [guesses] ...'.³⁵ Given that, even in modern military history, it has been difficult to fix the number of troops involved in a battle, the considerable work that has gone into some of the army lists needs to be acknowledged. Bowden records the 3/1st Foot Guards as comprising 811 rank and file (including NCOs) at the beginning of the Battle, which is close to Gurwood's figure of 798. Here, in attempting to calculate the frontage of a unit, one must remove the Sergeants from the list, as they would not have taken up position in the line, rather acting to keep order and formation.³⁶ Nor are musicians included in this calculation. This leaves Gurwood showing a figure of 758 rank-and-file present on the morning of Waterloo, which will be used for subsequent calculations.³⁷

Casualties at Waterloo averaged 30% for most of the British units (depending on who one reads).³⁸ For the 3/1st Foot Guards, whereas Cotton³⁹ shows 40% casualties the figures listed by Bowden⁴⁰ shows approximately 74% of the rank and file which, allowing for minor errors, puts the 3/1st at the top end of casualty figures for Waterloo. A descending figure can be calculated from the beginning of the battle to the end, which gives us a maximum and minimum frontage for the unit. Although never totally accurate, nor linear in its progression, this approach can be used as a guideline. If a final casualty rate of 50% is assumed (taking a rough midpoint between Bowden and Smith) it might be calculated that 40% casualties had been suffered by the time of the attack, with the additional 10% occurring during and after the attack.

³⁴ Hamilton-Williams, *Waterloo*, p. 403.

³⁵ *Ibid*, p.403.

³⁶ Sergeants were armed with halberds, a six-foot fierce looking battle-axe-cum-spear. These could be used, held horizontally, to push troops back into formation.

³⁷ Gurwood, *Dispatches*, vol.12, p. 486.

³⁸ Digby George Smith, *The Greenhill Napoleonic Wars Data Book* (London: Greenhill Books/Mechanicsburg, PA, USA: Stackpole Books, 1998), p. 548.

³⁹ Cotton, *A Voice from Waterloo*, p. 238.

⁴⁰ Bowden, *Armies at Waterloo*, p. 232.

The location of the troops

It is important to the description of the attack to be able to locate the units successfully on the battlefield when the attack took place. This is much more difficult than it first appears. There are discrepancies between soldiers in the same unit as to what they saw and where they were. This can partly be explained by being in different parts of the unit and looking in different directions. The obscuring effects of black-powder smoke must also be taken into account. A soldier on the extreme right of an infantry battalion in line may be several hundred feet from one on the extreme left. This would make for two completely different descriptions of any event, even to the extent of one soldier being completely unaware of what is happening to the other.

General Petit places the advance of the Imperial Guard along the Brussels road, with the 1st Battalion of the 3rd Chasseurs to the left of the road, and the 3rd Grenadiers in echelon.⁴¹ This means the Imperial Guard would have approached the Allied line as shown in Siborne's 'Plan showing positions and movements of Adam's infantry brigade' and in Adkin.⁴² The maps showing the approach from the direction of Hougoumont, such as Cotton, seem to misinterpret the direction of approach of the columns.

Several eye-witnesses record the position of Maitland's Brigade variously as, '... half-way between Hougoumont and La Haye Sainte ...' and '... above and to the left of Hougoumont ...' as well as, '... advanced, upon this ... tongue of ground ...'.⁴³ This is reflected in the locations as shown on the maps (See Figure 1), varying from immediately to the right of La Haye Sainte (Hamilton-Williams) through to the ridge behind Hougoumont (Craan). Wellington himself wrote, in a despatch following the battle, that, '... the enemy made a desperate effort with cavalry and infantry, supported by the fire of artillery, to force our left centre, near the farm of La Haye Sainte, which, after a severe contest, was defeated'.⁴⁴

⁴¹ G. C. Moore Smith, 'General Petit's Account of the Waterloo Campaign', *The English Historical Review* vol.18, no. 70 (1903): pp. 321–26.

⁴² Siborne, *Waterloo Letters*, pp. 288-289.

⁴³ *Ibid.*, p. 255, p. 256, p. 291.

⁴⁴ Gurwood, *Dispatches*, Vol 12, p. 482.

The formation and frontage of the troops

During the Napoleonic Wars, British and allied units (Portuguese and King's German Legion for example) fought in two-deep lines, with each soldier supposedly taking up a regulation 22 inches in close order, with the second rank one or two paces behind the first.⁴⁵ No soldier would take up exactly 22 inches, so there would be a small variability inherent in any formation. Therefore all measurements given for any unit in any formation must be approximate. And of course, as the unit suffered casualties or had companies detached, regardless of their formation the frontage would shrink accordingly. To receive the attack of the Imperial Guard the Foot Guards were formed up in four ranks, so that must be allowed for in the calculations. The reason for this seems to be that the Foot Guards had been in square to receive cavalry attacks, and it was quicker to 'unwrap' the square from the back face by bringing the sides and back faces into line with the front than it was to reform a two-deep line.⁴⁶ A two-deep line would have been preferable, as it would have allowed all the unit's muskets to be brought to bear. But perhaps space and time did not allow this.

The frontage presented to the enemy depends on what formation a unit is in. The front of a square is much smaller than that of a unit in line. In square, the unit formed up four deep, so the frontage would not be a quarter of a two-deep line, but an eighth. The frontage of a column varies depending on how it is made up. A column of divisions is two companies wide, and a column of companies (or platoons in some armies) is one company wide. The depth depends on the interval between companies, with full intervals allowing companies to wheel and change formation more easily. Depth depended on the intent, with columns closing up for an attack at close range, and opening up for manoeuvre and to reduce casualties from artillery fire. For example, it is possible to fit several units side to side in a smaller space if they are in column than if they are in line. They will have a greater depth in column which means that on a map any units behind will need to allow space to accommodate the column. There were many variations of formations but there is insufficient space here to describe them all. The

⁴⁵ David Dundas, *Rules and Regulations for the Formations, Field-Exercise, and Movements of His Majesty's Forces*, 2nd Edition, 1794, p. 41.

⁴⁶ Siborne, *Waterloo Letters*, p. 256. The letter of Lieutenant Colonel H Davis describes this formation change.

basic units of battalion and regiment were extremely flexible in the formations they could adopt for a variety of circumstances.

Taking a British battalion in line, the frontage is defined by the number of Other Ranks and NCOs, as the officers do not form part of the line (officially, company Captains formed up in the first line, but in the intervals between companies). So for the purposes of this paper, the total of Other Ranks and NCOs is the important figure. From the list of battalions in Maitland's brigade, their strengths are listed as 688 for the 2/1st Foot Guards, and 758 for the 3/1st.⁴⁷ Assuming that the light companies are detached for skirmishing duty, and that the light company comprised 10% of the unit strength (10 companies per battalion), then the approximate frontage of the units in four-deep line is calculated as 97 yards (89 metres) and 107 yards (98 metres) respectively. Next to one another, this would give a combined frontage of 204 yards (187 metres) excluding whatever distance is between the units, which is unknown.

These figures are for the establishment of the units at the beginning of the battle. But what of the casualties suffered during the battle up until 7:30pm? Maitland's Brigade was deployed initially to the east of Hougoumont on the ridge and suffered in the cavalry attacks of the afternoon. If the average of 40% casualties is taken for action *before* the attack of the Imperial Guard, we end up with a frontage, in four ranks, of 65 yards (60 metres) for the 3/1st Foot Guards. This assumes that 10% of casualties were inflicted during and after the attack. Of course, these measurements must not be taken as incontestable, and corrections can easily be made to add or deduct casualties. But even with variations of numbers within the limits available through different returns, the frontage variation would be minimal when compared with the dimensions from other maps. In Figure 2, Item 1 you can see, to scale against the units represented on the maps mentioned above, how much space the 3/1st Foot Guards would take up. The unfilled box is the unit at the beginning of the battle and the filled box shows the unit's possible frontage at the time of the attack, assuming 40% casualties. Compared to the space allocated on various other maps, it is clear to see that few, if any, have represented this unit adequately for the period of the Battle under review.

⁴⁷ TNA, WO 17/289.

ON MAPS AND MANOEUVRES

The contraction of units during a battle through casualties and detachments had the effect of opening gaps in the front line which needed to be filled, and this is why brigades were moved forward during the battle from the reserve into the first and second lines.

Whilst the calculations shown above might appear arbitrary in places, the description is clear enough that any reader may disagree and substitute their own figures. What they do, however, is to provide the reader with a launching point to understand the location and deployment of the troops.

Conclusion

War has been described as a combination of danger, boredom, confusion and waste. Military historians are not subject to the same danger as the combatants, and probably not the waste either, but the confusion of battle continues down the years. Our objective is to remove the boredom entirely, and present a factual yet interesting and informative view of an historical event.

Although this essay has focussed on Waterloo for its case study, the problems of mapping a battle are almost universal. Because of the speed with which a battle changes, troop movements or formation changes are almost impossible to capture in a single image. What Clausewitz calls the friction of war is also difficult to replicate in a map. Troops arriving in the wrong place, or not at all, can be problematic both for the general concerned and subsequently for the map maker.

Professor Colin Gray suggests that, "... the potential for mischief of a work of historical scholarship is singularly great if it attains fashionable status ...".⁴⁸ This description could account for the controversy which surrounds Siborne and his history of the Battle of Waterloo. Siborne describes, using the information provided by soldiers who served, a version of the Battle from a particular perspective. What adds to the controversy are the maps and models based upon his research, as well as the human story of his efforts to get his work to the paying public.

⁴⁸ Colin S. Gray, *War, Peace, and Victory: Strategy and Statecraft for the Next Century*, (New York: Simon and Schuster, 1990), p. 15.

But Siborne should not be held responsible for subsequent historians' blind acceptance of his works. Those maps which are direct copies of others add little or nothing to our understanding of this, or any other, battle. For the Imperial Guard attack at Waterloo, returning to the original sources gives us a much better understanding of the climax of the battle. The Imperial Guard advanced to the left La Haye Sainte but the attack became disjointed. Several units of the Imperial Guard reached the Allied line in a piecemeal fashion and were attacked and defeated by several different Allied units, all of whom could claim to have defeated the Imperial Guard.

When inaccurate maps of any description are presented in history books they do more damage than if the map was omitted entirely. Specific examples presented here show that little thought or research has gone into the presentation of some battle maps, distorting the actual shape and size of the units involved. Other maps exhibit their findings in an easy to understand way, showing fine detail with well thought out presentation. When presented with a poorly executed and researched map, the reader should ask why the author has decided to represent their research in this way. Sometimes it is to gloss over inexact research, or to cover uncertainties without laying them clearly before the reader in an honest and open way. The historian should not avoid responsibility for checking the accuracy of the maps which are to be attached to their work. The description in the text may be as historically accurate as it is possible to get, but that work will be undone by one poorly constructed map. Humans are visual creatures, and the image will generally have a longer lasting impact.

Next time you pick up a military history book and read an account of a battle which is accompanied by a map, take care to consider the reliability of the map and not just the account presented to you.

