

'Tanks in Unexpected Places': The Fighting Effectiveness of 4th (Independent) Armoured Brigade, 1943-45

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Abstract

This thesis considers how fighting effectiveness was both produced and maintained during the Second World War. 4th Independent Armoured Brigade, the subject of this study, was part of the relatively small minority of British formations that fought in several theatres during that war. The thesis demonstrates that the brigade's ubiquity was due in large parts to its ability to generate and sustain fighting effectiveness. To this end, the work examines three key areas; leadership, morale and organisational learning at the tactical level in the British Army during the Second World War with a particular focus on 1943 to 1945. It demonstrates the ways in which these wider organisational influences worked within a single brigade. The thesis seeks to define and assess fighting effectiveness at formation level, which, it will be seen, is largely shaped by the three areas mentioned.

The brigade was one of the small number of formations transferred from the Mediterranean to support the largely inexperienced 21st Army Group. The performance of the veteran formations has been controversial and they have been the subject of considerable criticism. This thesis argues that 4th Armoured Brigade performed significantly better than many of the veteran formations, and indeed many other formations within 21st Army Group, and will explain why this was the case. The exceptional leadership provided by the brigade's two main commanders during the period was important. John Currie and Michael Carver were both highly capable. Carver would go on to become chief of the defence staff.

The climate generated by both men had an effect on the way the brigade was led and the way it operated in battle. Additionally, this thesis shows that the brigade's composition, in terms of the units it contained and their individual ethoses, as well as the experiences they had undergone, had a powerful effect on the brigade's morale, motivation and professionalism. The army of the 1939–45 period was a heterogenous organisation with strong and varied localised traditions. This was

compounded by the dispersed nature of British forces between 1941 and 1943. The thesis demonstrates the varied effects of this and the degree of difference that could be found between some British formations.

Fighting in Italy and then across North-West Europe from Normandy to the Baltic, 4th Armoured Brigade encountered a great variety of enemy formations in a huge array of landscapes. The study shows the differing influences of both and how they drove tactical and organisational change within the brigade. The three influences of leadership, tactical learning and morale were filtered through the impact produced by enemy action and difficulties stemming from the terrain and climate. The thesis proposes a model of fighting effectiveness drawn from the operational successes of 4th Armoured Brigade.

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I would like to dedicate this thesis to two people who didn't live to see the completion of the project: my grandparents, May and Ted Wood, because he was there and she waited at home under the bombs. You both always encouraged me to be interested in history.

List of abbreviations, technical terms and foreign words used in this thesis

2ic Second in command

AGRA Army Group Royal Artillery

AP Armour piercing

APDS Armour piercing, discarding sabot.

AT Anti-tank

ATM Army Training Memorandum

Bde. Brigade

Bn. Battalion

CRASC Commander Royal Army Service Corps

CSM Company Sergeant Major

CLY County of London Yeomanry

CO Commanding Officer (commander of a unit, e.g. battalion or similar)

Coy Company

Cpl Corporal

DCLI Duke of Cornwall's Light Infantry

DTI Directorate of Tactical Investigation

FOO Forward Observation Officer. Directs fire and spots for the artillery.

GOC General Officer Commanding

Heer The German Army

Kampfgruppe Battle group (Plural – Kampfgruppen)

KO/KO'd Knocked out (specifically AFVs)

Kreigsmarine German Navy

KRRC King's Royal Rifle Corps

LMG Light machine gun

MTP Military Training Pamphlet

MG Machine gun

MMG Medium machine gun

PIAT Projector infantry anti-tank. British man-portable AT weapon.

Posn Position.

PW Prisoner of war. Also POW.

NCO Non-Commissioned Officer.

NSDAP Nationalsozialistische Deutsche Arbeiterpartei – National Socialist German Workers

Party (Nazis).

OC Officer Commanding (commander of a sub-unit, e.g. company)

O Group Orders group.

OP Observation Post.

OR Other ranks (NCOs and troopers/riflemen/gunners etc.).

RAD Reichsarbeitsdienst – National Labour Service; the pre-military compulsory work

service undertaken by German men, they were used in major building and agricultural projects. RAD service included some paramilitary training.

RB Rifle Brigade.

RE Royal Engineers.

Recce Reconnaissance.

RHA Royal Horse Artillery.

RTR Royal Tank Regiment.

SP Self-propelled (artillery).

SS Schutzstaffeln (Protection Squads).

TA Territorial Army, volunteer reserve of the British Army.

Waffen-SS Literally, Armed SS; combat formations of the SS.

Wehrmacht The armed forces of Germany under the Third Reich

WOSB War Office Selection Board. Used in officer selection.

Declaration of Originality and Prior Publication

I hereby declare that my thesis/dissertation entitled "Tanks in Unexpected Places": The Fighting Effectiveness of 4th (Independent) Armoured Brigade, 1943-45' is the result of my own work and includes nothing which is the outcome of work done in collaboration except as declared in the Preface and specified in the text, and is not substantially the same as any that I have submitted, or, is concurrently submitted for a degree or diploma or other qualification at the University of Buckingham or any other University or similar institution except as declared in the Preface and specified in the text. I further state that no substantial part of my thesis has already been submitted, or is concurrently submitted for any such degree, diploma, or other qualification at the University of Buckingham or any other University or similar institution except as declared in the Preface and specified in the text.

J. Briggs 24th April 2023

Introduction

At a police station in South London in the mid-1950s, a group of constables are parading prior to attending a major state occasion in central London. Those who are entitled to them are wearing their medals. Most of those over thirty have at least one. Their inspector surveys the group. He has a reputation for being strict and difficult. He too is wearing a couple of medals from army service during the war. He notices something and approaches PC Ted Wood, a relatively new officer. PC Wood is wearing a large number of medals.

"Wood, are you entitled to all of those medals?"

"Yes. Sir"

"Really? What did you do?"

"KRRs, Sir, 4th Armoured Brigade. North Africa, Italy, Normandy... Sir."

The inspector is visibly crestfallen. "Ah... well then, well done Wood, carry on."

Afterwards, Ted and some of the other PCs laugh about this.1

Of the more than one hundred formations² of the British Army during the Second World War, only a small handful fought almost continuously and in most of the main theatres that British and Commonwealth forces were engaged in. 4th Independent Armoured Brigade, the subject of this study, was part of this minority. The brigade fought at El Alamein in October 1942, participating in one of the first major land victories for the British. It then played a critical role in breaking through the Mareth Line early in 1943, helping to hasten the end of the *Deutsches Afrika Korps*. Transferred to Italy, the brigade took part in the northwards slog up the Adriatic coast before returning to the UK

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¹ Based on interviews with Ted Wood (2 KRRC) conducted by the researcher.

² That is, independently existing divisions or brigades and not including Commonwealth and Imperial forces. See George Forty, *Companion to the British Army 1939-45* (Stroud: History Press Ltd, 2009) Chapter 3.

to prepare for the invasion of France. The brigade had notable roles in Normandy and the breakout, being one of the first formations to cross the Seine. It was subsequently also one of the first to
cross the Rhine. By the end of the war, the brigade's insignia, the black rat, was one of the more
well-known ones, and the formation had featured in one of Chester Wilmot's *Unit Spotlight*broadcasts on the BBC where it was described as a brigade that had 'been in the forefront of the
battle – almost without a break – since 1940'. Certainly, the brigade had a varied and intense war,
but there are other factors that make a study of it worthwhile.

The brigade was also one of a small body of independent brigades within the British Army. This unusual status illustrates elements of British doctrine relating to the organisation of the army and the role of armour. The independent armoured brigades were designed chiefly to support infantry divisions, but also to bolster armoured divisions. This concept, it will be seen, through its development, sheds light on a number of issues around doctrine, tactical methods and organisational structure and learning in the British Army of the Second World War. Further, 4th Armoured Brigade produced three officers who would later become Chiefs of the General Staff: Michael Carver, Roland Gibbs and Edwin Bramall. Carver and Bramall would also subsequently be chief of the defence staff. The brigade clearly had an exceptional record of producing people who would go on to be the army's most senior leaders,⁴ and this appears to say something about performance, reputation and motivation in the British Army during the Second World War, an idea that will be explored in this thesis. Yet very little has been written about it. The brigade was one of the small number of formations⁵ transferred from the Mediterranean by Lieutenant General Bernard

³ Correspondence with Chester Wilmot, Papers of FM Lord Carver, IWM. Transcript of the broadcast in 4th Armoured Brigade Papers, Tank Museum, Bovington.

⁴ Beside the three Chiefs of the General Staff there were several other senior figures who served in the Brigade, notably Gerald Hopkinson, CO of 44 RTR, who would become Director of the Royal Armoured Corps in 1959.

⁵ A brief explanation should be offered here of what is meant by 'formation' and 'unit'. A formation is a number of units grouped together and under one commander. A unit in the British Army of the 20th century was a battalion or regiment with between 500 and 1000 soldiers within it. Formations can comprise varying numbers of units and conform to several types. A brigade was the smallest formation used by the British Army during this period. Brigades could also comprise a division, the army's main type of formation in the 1939–45 war;

Montgomery to stiffen his largely inexperienced 21st Army Group in the early spring of 1944. The performance of this minority of experienced formations has been controversial and they have been the subject of considerable criticism, as the literature review will show.⁶ This study contends that 4th Armoured Brigade performed significantly better than many of the others transferred from the Mediterranean, and indeed many other formations within 21st Army Group, and will seek to explain why this was. Fundamental to this will be an examination of fighting effectiveness. How this can be defined and measured will be explored within this work.

The Second World War was the last conflict in which Britain deployed massed armies and was considered to have been a major combatant nation.⁷ It has undoubtedly become a touchstone of national identity and the subject of many myths.⁸ This was the last major war in which UK forces formed one of the largest (sometimes *the* largest) contingents within an Allied force.⁹ Britain had a significant influence on the overall direction of Allied strategy during the conflict, a result of its imperial status and also of its position as an undefeated enemy of Nazi Germany from the war's outset. This has simply not been the case since 1945. In the second half of the twentieth century and on into the twenty-first, the UK has consistently been a 'junior partner' within NATO and UN operations.¹⁰ Unsurprisingly, the Second World War is regarded as a major achievement and a source of national pride.¹¹ Yet the performance of the British Army during the Second World War

these contained either two or three brigades. See George Forty, *Companion to the British Army 1939–45* (Stroud: History Press Ltd, 2009).

⁶ Carlo D'Este, *Decision in Normandy* (London: Penguin, 2004) and Max Hastings, *Overlord* (London: Pan, 2010).

⁷ Buckley, *Monty's Men* (London: Yale University Press, 2013), pp. 4-5. Fennell, *Fighting the People's War* (Cambridge: CUP, 2019). pp. 683-697.

⁸ For an interesting discussion of this see Brian Bond, *Britain's Two World Wars Against Germany* (Cambridge: CUP, 2014), particularly Chapter 1 but discussed throughout.

⁹ For instance, in North Africa, British and Commonwealth forces provided by far the largest Allied contingent even after the arrival of US II Corps; refer to Niall Barr, *Pendulum of War* (London: Jonathan Cape, 2004). On D-Day, British and Canadian troops that landed outnumbered Americans; there were approximately 72,000 US troops and approximately 83,000 British and Canadian troops. Refer to Ellis and others, *Victory in the West, Volume I: The Battle of Normandy. History of the Second World War United Kingdom Military Series*, (Uckfield: Naval & Military Press, 2004), Chapters VIII and IX and <www.theddaystory.com> (D-Day Story Museum, Portsmouth), [retrieved March 10th, 2023].

¹⁰ Richard Dannatt, *Boots on the Ground: Britain and her Army since 1945* (London: Profile Books, 2017) gives a wide-ranging discussion of the army's roles post-1945.

emerged as a subject of controversy, riven with strong opinions, even while the war was still being fought. Subsequently, the issues surrounding the British Army's capabilities and effectiveness have dominated both the academic and the popular discourses in the UK and continue to do so. They are also heard to varying degrees in writing emerging from Commonwealth countries and the US. Overwhelmingly, this debate has been focussed on the higher formation level, primarily at army and corps level as the historiography that follows amply demonstrates. Parallel to this, but on a very different scale, are the large numbers of books focussing on the experiences of individuals which have appeared in the last thirty years. These are either in the form of the personal memoirs of veterans or social history works that are reliant on the contemporary or recently acquired accounts of individuals. An attempt to fully integrate these two areas of research would appear to be fruitful in a search for how military organisations fought and thought. This thesis is strongly informed by the approach put forward by Canadian historian Terry Copp in the early 2000s which can be summarised in this quote:

When *Fields of Fire* appeared in 2003 an American colleague asked, 'When will you Canadians stop endlessly analysing your three division army. No one else ... knows the names and personalities of divisional, brigade and even battalion commanders. Why don't you look at the bigger picture?' The answer is that before we can look at the bigger picture in 21 Army Group, we need studies of the British Army at corps, divisional and brigade level so that we can have a firm basis for addressing questions about leadership, command, morale, combat motivation and combat effectiveness.¹⁴

This seems a convincing and relevant argument and one with particular weight in a subject dominated by the chaotic interaction of various comparatively small groups.¹⁵ The complicated

¹² Questions were asked about both morale and training throughout the war by senior officers in the army; David Fraser, *And We Shall Shock Them* (London: Bloomsbury, 2012) Kindle edition. pp. 69, 139-40 and David French, *Raising Churchill's Army* (Oxford: OUP, 2000) pp. 242-43.

¹³ A good summary of this can be found in the introduction to L.P. Devine, *The British Way of War in Northwest Europe 1944-45* (London: Bloomsbury, 2016).

¹⁴ Terry Copp, 21st Army Group in Normandy in The Normandy Campaign 1944: Sixty Years On ed. John Buckley, p. 19.

¹⁵ Leo Murray, *Brains and Bullets: How Psychology Wins Wars* (London: Biteback Publishing, 2013), this theme is discussed throughout.

interface of numerous 'factors and actors' within military units on operations makes the subject ideal for examination that applies models and theories influenced by complex organisational theory and this study utilises some of these.

Overall, this thesis has relevance in two ways. First, on the historical level it aims to try and establish some clarity in a complicated and contested area. This may be something of a cliché but nonetheless, it has both value and relevance. We generally know what happened in most campaigns of the Second World War, because there is a mass of contemporary accounts and veteran testimony plus numerous official histories and secondary source works. Very little is now contested in the broader sense, but why events unfolded as they did is still strongly contested.¹⁶ The historiographical section below will demonstrate how the main currents of thought have changed since the war in terms of assessments of the British Army's overall performance and some of the reasons for this. This thesis contends that a full understanding can only be built up through a careful study of the way in which individual units and formations went about their 'business' on a day-to-day basis. That business was of course principally, fighting, but it was supported and influenced by a host of other activities such as training, operational planning and tactical learning. The degree of variation in fighting effectiveness between units has not been given the emphasis that is required in most of the existing literature. 17 That variation was generally of a profounder sort than that seen in many other armies and was a direct result of the nature of the organisation and structure of the British Army as this thesis will show. Of particular relevance is the issue of the performance of the 'Desert Army' units within 21st Army Group.

1

¹⁶ A good example can be found in the differing interpretations of the fighting at Villers Bocage on June 13–14th 1944. Compare Hastings, *Overlord*, pp.153-67 and Michael Reynolds, *Steel Inferno*, pp.102-12, to Buckley, *Monty's Men*, pp. 66-70 and James Holland, *Normandy 44*, pp. 274-76. They provide very different attributions of blame and the weighting of the impact on the campaign.

¹⁷ Many works focus on a small number of particularly successful or unsuccessful formations or units with little concern for where they sit overall. The huge catalogue of material on the SAS, Parachute Regiment and LRDG is a case in point.

Finally, despite the now considerable distance in time, as Mungo Melvin has written,

the Normandy campaign of 1944 remains a rich treasure trove of relevant and stimulating issues for an examination of contemporary warfare ... to dismiss it in a modern context of 'effects-based operations' and 'network-centric warfare' is to ignore the enduring aspects of war ... military success depends on the appropriate blending of the conceptual, moral and physical components of fighting power.¹⁸

This study argues that this applies across the period under consideration and that valuable lessons about combat performance, leadership and lesson learning with contemporary value could still be drawn from studying these events by those whose task it is to do so, provided that a solid basis of analytical historical study has been laid down by work such as this.

Secondary Sources, Published Primary Sources and Historiography

The secondary sources utilised by this thesis broadly fall into three largely separate categories. First, works specifically about 4th Armoured Brigade or other individual units or formations where these are considered. Second, material more generally concerned with the British or German armies during the Second World War and/or specific campaigns within the war. Third, technical works concerning doctrine and methods and studies of psychological, social and cultural factors which have an impact on military organisations and their effectiveness. Inevitably, the categories are not always clear cut and there is a degree of overlap in some studies. However, for the sake of clarity and to help define the lines of enquiry being used, the sources will be examined under these three headings. These reflect the overarching position of this thesis. That is, that a full understanding of the brigade's performance can only be built up through the examination of the technical, organisational and cultural contexts in which it existed. One can only understand in what ways 4th Armoured Brigade differed from its peers, the degree of this, and how it generated fighting

¹⁸ Mungo Melvin, 'The German Perspective' in *The Normandy Campaign 1944* (Abingdon: Routledge, 2006). p.30.

effectiveness if there is an understanding of what was 'the norm' in the army of that time. Indeed, even if one can realistically speak of such a paradigm. The thesis will explore commonalities and differences across British combat formations of the period. The brigade's performance can only be assessed against the expectations of both peers and enemy forces. To break these three sets of contextual references down a little more we should consider as technical the weapons and equipment provided by the army (and ultimately HM Government) and the logistical framework that supported these to be technical too. The organisational context would encompass the structure of the army, from the highest levels down to the composition of platoons and sections. Additionally, this also includes the way in which the army and the formations and units within it conducted operations, the doctrine that informed this and the organisational learning processes¹⁹ that underpinned all of it. The cultural context refers both to the culture, or as will be seen later, more properly the cultures of the British Army during the 1930s and 1940s, that is, the individual 'microcultures' of formations and units, and to the 'cultural stripe'20 imposed by the background civilian culture of British society in the same period. When discussing culture, a definition drawn from anthropological literature gives the understanding implied within this thesis: a 'shared set of (implicit and explicit) values, ideas, concepts, and rules of behaviour that allow a social group to function and perpetuate itself'.21 Examining these multiple strands will require source material drawn from a wide range of contexts and begins with works concerned with the brigade itself.

4th Armoured Brigade has had very little written about it specifically. A history of the brigade during the war was produced within the formation itself in 1946 and was written by its then commander,

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¹⁹ The term organisational learning was not used in Britain in the 1940s but it will become clear that a similar concept existed even if it was not clearly defined. For background see P.H. Mirvis, 'Historical foundations of organization learning', *Journal of Organizational Change Management*, (1996), Vol. 9 No. 1, pp. 13-31. ²⁰ For the influence of the 'background' culture of the society from which a specific group comes see Charles Kirke, *Red Coat, Green Machine: Continuity in Change in the British Army 1700-2000* (London: Continuum Books, 2009).

²¹ Patricia Hudelson, 'Culture and quality: an anthropological perspective' in *International Journal for Quality in Health Care* (2004) Volume 16, Number 5: pp. 345–346.

Michael Carver.²² Now a comparatively rare work it comprised a straightforward narrative account largely based on the war diaries of the brigade and its constituent units. In addition, Field Marshal (as he was by then) Carver wrote an autobiography Out of Step (1989),²³ which covered his time in command of the brigade in some detail. This work is, furthermore, of interest as it also encompasses his formative experiences in the pre-war army and as a staff officer and a regimental commander in Eighth Army in the early years of the war. The personality and thinking of Carver clearly had an effect on the brigade's style of leadership and tactical methods as this study will show. Patrick Delaforce's *Monty's Marauders*²⁴ (1997) is the only even relatively recent work focussing on 4th Armoured Brigade and was indeed the first in decades. It draws on the war diaries of the brigade (and its constituent units) and a number of oral history interviews with former members of the brigade. It largely reflects the immediate post-war opinions of many veterans, such as Delaforce himself, who contended that their weapons and vehicles were generally inferior to those of the Germans.²⁵ There are no other works which look at the brigade specifically. With regard to the individual units within the brigade, the situation is similar. The three armoured regiments and the motor battalion all produced histories of their units that were published between the late 1940s and early 1960s and were written by former or current officers of these units.²⁶ All were straightforward narrative works based largely on the war diaries. Nonetheless, they remain valuable if fairly constrained resources²⁷ and all of them were looked at for this study. In addition, the 'year books' produced by units during the war have also been examined. These were typically produced

²² Michael Carver, *A History of 4th Armoured Brigade* (1946) Manuscript, Papers of FM Lord Carver, IWM, published copy (Glückstadt, Germany: Privately published, 1946) in 4th Armoured Brigade Papers, Tank Museum, Bovington.

²³ Michael Carver, *Out of Step* (London: Hutchinson, 1989).

²⁴ Patrick Delaforce, *Monty's Marauders* (Barnsley: Pen & Sword, 1997).

²⁵ French, ibid, Chapter 3.

²⁶ 2 KRRC; Wake, Deedes, *Swift and Bold* (Winchester: Gale and Polden,1948), 3 CLY; Andrew Graham, *Sharpshooters at War* (London: The Sharpshooters Regimental Association, 1964), 44 RTR; Honniball, Hopkinson and others, *A History of 44th Royal Tank Regiment in the War of 1939-45* (Unknown: Ditchling Press, 1965), GREYS; Michael Carver, *Second to None: The Royal Scots Greys, 1919–1945* (London: McCorguodale, 1954).

²⁷ Controversial incidents within units are usually dealt with by ignoring them or by stripping away anything that might be seen as critical. Two examples are the sackings of Bill Heathcote-Amory and Sandy Cameron. These are not covered in any way in either the unit war diaries (WO 171/855 and WO 171/1327) or the Brigade HQ's one (WO 171 / 601). Notably, they are not discussed in either of the post-war regimental histories either.

at regiment or 'cap badge' level and were intended to keep serving soldiers in touch with their parent units. These volumes were, of necessity, often heavily censored. However, they convey a strong sense of time and place and as such are also important to this study. Two former officers of the brigade, one from the Royal Scots Greys and one from 4th Royal Horse Artillery, wrote accounts of their service in the war which were published in the 1990s and which were utilised for this work.²⁸ It is thus clear that the available published sources concerning the brigade are relatively scarce but nonetheless not so limited as to make research impossible. However, attention now needs to be paid to a far larger group of sources.

An examination of the wider secondary literature about the British Army in the Second World War inevitably needs to reflect three important factors. The first two of these are historical, the third contextual, but they are all equally vital. The first is the general tone and direction of the historiography in the years since the war with an acknowledgment of changes in emphasis that have occurred over time. The second is an awareness of the key areas identified as controversial or difficult by commentators at the time and later, and the final factor is an awareness of the wider strategic and political context within which operations took place. There are two major issues which were controversial during the war and which have remained subjects of debate since then that will be of relevance to this study. These are, the design and proposed role or roles of armour in the British Army of 1939–45 and the techniques and doctrine around the co-operation of infantry and tanks within the army in the same period.²⁹ In addition, consideration of inter-arm co-operation more generally will also be important for this thesis. In a broader sense, and chiefly by way of context, this study also gives some attention to the role of doctrine in British military planning, training and operations and the development and effectiveness of command and control techniques at the tactical level. Where these areas become more directly pertinent is in the sphere of 'lesson learning'

²⁸ Aidan Sprot, *Swifter Than Eagles: War Memoirs of a Young Officer 1939-45* (Bishop Auckland: Pentland Press, 1998) and Robin Dunn, *Wig and Sword* (London: Quiller Press, 1993).

²⁹ Refer to; David Fraser, *And We Shall Shock Them* (London: Bloomsbury, 2012) Kindle edition. Part One and David French, *Raising Churchill's Army*, pp. 1-7, 97-106, 265-66.

within 4th Armoured Brigade, that is, how did the lessons often bloodily learnt in combat operations translate into formalised practices designed to improve fighting effectiveness?

The overall performance of the British Army in the Second World War is a vast subject. However, significant parts of it are relevant to this study and require discussion. The previous literature has shaped the tone of debates about that army and created assertions that this thesis seeks to overturn or revise. What follows is a brief outline of the historiography. This picks out some of the most influential works and gives an overview of the key contentions over time as well as noting those works that have been significant in the development of the arguments made in this thesis. Coverage of the army's performance began as soon as the war ended. Much of the emphasis was placed on the Normandy campaign, which was often seen, with some justification, as the most important and instructive phase of the North-West European fighting. Despite the Allies' victory in Normandy (and thereafter in Western Europe), most of the early criticism of the conduct of the campaign came from British and American writers. Basil Liddell Hart was an early critic with the short paper Lessons of Normandy (1952),³⁰ in which he berated the Allies generally, and the British in particular, for being undynamic. He was in fact less critical of the senior leadership than the lowerlevel commanders and the rank and file soldiers. Liddell Hart, a former army officer and prolific writer of both military theory and history, was a controversial but highly influential figure. He had played a significant role in debates about mechanisation, the role of tanks and restructuring the army in the inter-war period. 31 Michael Carver began a protracted correspondence with him during the war which continued until the older man's death in 1970.32 Liddell Hart, of course, had his own well-acknowledged 'axes to grind' with elements of the British military establishment.³³ He was also perhaps under the influence of the many senior German officers he helped to debrief immediately

³⁰ Basil Liddell Hart, *Lessons of Normandy* (1952) North II/3/387 King's College London: Liddell Hart Centre for Military Archives.

³¹ Alex Danchev, Alchemist of War: The Life of Basil Liddell Hart (London: Nicholson, 1998).

³² Papers of Field Marshal Lord Carver, IWM.

³³ Danchev. Alchemist of War.

after the war. He produced a volume based on these debriefs, *The Other Side of the Hill* (1949),³⁴ which made similar points via the opinions of a number of former German officers. The effect of German accounts of the campaign on Anglophone commentators is an important area. Liddell Hart, and indeed many later writers such as Carlo D'Este and Max Hastings, have tended to take these at face value. David French has questioned this, arguing very convincingly, that researchers should look harder at motivations and context. Liddell Hart's post-war writing commenced a trend of criticism of the British in the campaign which slowly increased in the following decades. This held that, overall, they had functioned poorly at the tactical and operational levels. However, when the British Government published the massive multi-volume Official Histories of the war during the 1950s and '60s, they were, perhaps not surprisingly, largely positive in their coverage of the army's performance.³⁵ The Official Histories, some commentators argue, portrayed a series of 'uninterrupted triumphs'³⁶ from 1943 onwards and were 'so smugly complacent that it ... invited the sharp revisionism...[that followed].'³⁷ This critical approach, regardless of its motivations, had not dissipated and came to greater prominence in the 1980s with the publication of two key books.

Carlo D'Este's *Decision in Normandy* (1983) was quite simply one of the most influential and best-selling books on the campaign³⁸ up to that point and it remains 'probably the most widely read single volume on the Normandy campaign'.³⁹ D'Este (a former US Army officer) argued that the Allies suffered from both inadequate senior leadership, particularly from Montgomery and Bradley, and poor doctrine. The Germans are depicted as having superior doctrine and greater tactical and operational skill. The defeat of the Germans in a *materialschlacht* was thus much as the Wehrmacht and Waffen-SS accounts portrayed it and D'Este cited many of these. The book was 'carefully

³⁴ Basil Liddell Hart, *The Other Side of the Hill* (London: Pan Books, 1999), originally 1949.

³⁵ The History of the Second World War (London: HMSO), principally volumes I and II of *Victory in the West* L.F. Ellis et al published in 1962 and 1968 respectively.

³⁶ Alan Allport, Review of Buckley, *Monty's Men*, in *Literary Review*, Dec. 2013/Jan. 2014, Issue 416. ³⁷ Allport, ibid.

³⁸ Cited 321 times on Google Scholar as at 15/12/2022. On release, the UK paperback was published by Pan, a very large publisher, and presumably it had a wide audience.

³⁹ John Buckley (ed) *The Normandy Campaign 1944: Sixty Years On* (Abingdon: Routledge, 2006) p. 2.

researched, militarily perceptive and lucidly written'40 and it remains an important account of the campaign. D'Este was a credible author, he lectured at the U.S. Army Command and General Staff College⁴¹ and was awarded the Pritzker Military Library Literature Award for Lifetime Achievement in Military Writing in 2011.⁴² His criticism of the British forces was nuanced⁴³ and lacked the overt bias seen in some other US accounts written in the decades immediately after the war, 44 a continuing legacy of the inter-Allied acrimony around some aspects of the campaign. D'Este was critical of the British argument that they had a manpower shortage in 1944 and stated that large resources remained untapped for political and social reasons.⁴⁵ Although primarily a narrative history of the campaign and, as noted, successful with a general readership, Decision in Normandy achieved and has maintained academic credibility through its skilled marshalling of primary sources. 46 Max Hastings's Overlord (1984)⁴⁷ followed a very similar line and also contrasted the cautious and slow moving Allies (especially the British) with the faster, more dynamic and aggressive German forces. A contemporary review in the American Intelligence Journal called the book 'revisionism at its best'.48 Hastings contended, and indeed still does, that it was not so much that the British performed badly but that the Germans performed exceptionally well.⁴⁹ He used a very large number of British veteran accounts in the book including an interview with Lord Bramall (of 2 KRRC) who was also consulted for this work. Overlord reached a large audience in the UK,50 and the author was, and remains, a high-profile print journalist. The book was not well received by many British veterans and

⁴⁰ David Fraser, Review of, D'Este, *Decision in Normandy* in *London Review of Books*, Vol. 5. No.22. December 1983.

⁴¹ Carlo D'Este's obituary, published 24/12/2020 at www.norwich.edu/news, retrieved December 2022.

⁴² Retrieved from <www.publishersweekly.com> [18th December 2022], original page published June 2011.

⁴³ A point emphasised in Fraser's review cited above.

⁴⁴ See Charles Macdonald's *The Mighty Endeavor* (London: Endeavour Press, 2015) and Martin Blumenson in the US Army *Official History* and later essays.

⁴⁵ Carlo D'Este, *Decision in Normandy* (London: Penguin, 2001) pp. 252-70.

⁴⁶ The book had a four-page bibliography, which is relatively unusual for a popular history work, and it referenced scores of primary source documents in US and UK archives.

⁴⁷ Max Hastings, *Overlord* (London: Pan, 2010).

⁴⁸ William Lind, Review of Overlord in American Intelligence Journal Vol. 6, No. 4 (February 1985), pp. 18-20.

⁴⁹ Lecture, Cavalry and Guards Club, on 07/02/2012, described the British as being in 'the top five' armies of the Second World War but the Germans as 'number one'.

⁵⁰ Hastings states on his website that it was a 'No. 1 bestseller' on its release in 1984 <www.maxhastings.com> [retrieved 5th December 2022]; it is difficult to gauge the numbers sold but it was certainly very successful.

Sydney Jary's criticisms⁵¹ of it are well known. Indeed, Hastings's own website notes 'Some British veterans publicly attacked Hastings for his views, which they thought unjust to the memory of fighting soldiers'.⁵² In 2014, as the 70th anniversary of D-Day approached, he was still happy to write in *The Times* referring back to the publication of *Overlord*:

In 1984 I wrote a book about Normandy that brought a storm of criticism from veterans because I argued that the German soldier showed himself to be much more effective than his allied counterpart. *This is now generally accepted*,⁵³ but it was suggested then that a brash young writer had succumbed to cheap iconoclasm.⁵⁴

However, like D'Este, Hastings argued his points persuasively and with compelling references to primary sources. A number of other works produced in the 1980s and 1990s continued to be highly critical of the British Army's performance, most notably John Ellis's *Brute Force* (1990).⁵⁵ Ellis reiterated the argument that the Allies won in a *materialschlacht* and made detailed use of wideranging statistics.⁵⁶ Even more than Hastings and D'Este, he was scathing of many senior Allied commanders, arguing that their methods were pedestrian and needlessly heavy-handed.⁵⁷

During the early 2000s, a 'revisionist' movement began to emerge, principally among academics in the UK and Canada, that reappraised the performance of 21st Army Group in North-West Europe, and again the principal focus was Normandy. The origins of this lay largely in the PhD theses of several of the authors concerned which were written in the mid- to late 1990s and clearly intended to overturn the consensus that had emerged in the 1980s.⁵⁸ These works reassessed the evidence

⁵¹ Sydney Jary, *Eighteen Platoon* (Bristol: Sydney Jary Ltd.1987).

⁵² [Retrieved December 5th, 2022].

⁵³ My emphasis. This historiography will show it was far from 'generally accepted' in 2014.

⁵⁴ Max Hastings, *D Day's heroes alone did not destroy Nazism*, 03/06/2014, *The Times*, retrieved from <www.thetimes.co.uk> [December 8th, 2022].

⁵⁵ John Ellis, *Brute Force* (London: Andre Deutsch, 1990).

⁵⁶ There are 23 pages of statistical tables in the 1990 hardback edition, all with clear reference to primary sources.

⁵⁷ Ellis, pp. xviii-xix, 375-78, 539.

⁵⁸ Timothy Harrison Place, 'Tactical Doctrine and Training in the Infantry and Armoured Arms of the British Home Army, 1940-1944' (unpublished doctoral thesis, University of Leeds,1997) and Stephen Hart, 'Field

used to make the arguments put forward by D'Este, Hastings and Ellis and came to different conclusions. Not unreasonably, it was asked, if the Allies were so very poor at fighting, and the Germans so very good, even with a greater material preponderance, how they had they won the war? How could continuous tactical defeats somehow be woven into a crushing victory?⁵⁹ The revisionist view has remained a clear trend since 2000, though it is noticeably more prevalent in academic works than in those aimed at the general reader. It is not hard to find books aimed at a non-academic or non-specialist audience that still advance similar arguments to those made forty years ago, for example Gordon Corrigan's Blood, Sweat and Arrogance: The Myths of Churchill's War (2006), 60 Anthony Beevor's, D-Day: The Battle for Normandy (2009) and Arnhem (2018), 61 and Tony Colvin's *The Noise of Battle* (2016).⁶² One of the first and most influential⁶³ 'revisionist' books was David French's Raising Churchill's Army (2000), an extensive and careful reappraisal of the British Army throughout the Second World War. French argued that the army had learnt the lessons of the early part of the war and developed accordingly, playing to its strengths and mitigating its weaknesses. He argues that it performed well throughout the second half of the war. Emerging at the same time, Timothy Place's Military Training in the British Army, 1940-1944 (2000) explores some of the same issues as French's work but as the title implies, has a much stronger emphasis on training and its inter-relationship with doctrine. Place argues through wide-ranging references to

Marshal Montgomery, 21st Army Group and North-West Europe, 1944-45' (unpublished PhD thesis, King's College, London, 1995).

⁵⁹ Buckley, *Monty's Men*, pp. 299, 302-03, Holland, *Normandy 44*, pp. 532-36.

⁶⁰ Gordon Corrigan, *Blood, Sweat and Arrogance: The Myths of Churchill's War* (London: Weidenfeld and Nicolson, 2006). 'The German soldier was the best in Europe.' p. xvii.

⁶¹ Anthony Beevor, *D-Day: The Battle for Normandy* (London: Penguin, 2009) *Arnhem* (London: Penguin, 2019). Both books made the *Sunday Times* non-fiction bestseller list. In *D-Day*, the British Army was 'conservative' and had a 'cult of the gentleman amateur', p. 15. There was 'war-weariness in large parts of the British Army. An aversion to risk had become widespread...', p. 264. In *Arnhem*; 'the British...wanted to make the best of a bad war by joking and referring to any battle as a "party", 'p. 40, 'the German Army was based on ruthless prioritisation, which the British Army manifestly failed to match', p. 183. In fairness, *Arnhem* is considerably less critical of the British and more critical of the Germans in terms of overall performance than the earlier book.

⁶² Tony Colvin, *The Noise of Battle* (Solihull: Helion, 2016). This work is generally positive about the performance of the British Army at unit and formation level but is extremely critical of higher-level commanders (particularly Montgomery) and the War Office and government, claiming their policies hampered the British at the tactical level because of faulty equipment and doctrine. 'Such a way of waging war was costly, careless of lives and ineffective' p. 639. British armoured divisions were 'as redundant as First World War cavalry divisions', p. 652.

⁶³ Referred to as 'influential' by Niall Barr in *Pendulum*, location 280 (Kindle edition.), Google Scholar (April 10th, 2022) records 275 citations for French's book in published works.

primary source material, that much of British training and doctrine was haphazard and poorly thought out but that efforts to address this were undertaken in 1943 and 1944. He concluded that 'much good work was done between Dunkirk and D-Day but somehow the army never managed to collect the good together and eliminate the bad'.⁶⁴

Stephen Hart's *Colossal Cracks*⁶⁵ (2007) examined the performance of 21st Army Group in 1944 and 1945 in depth and remains one of the most detailed examinations of the British Army in Europe at the tactical and operational level to date. Hart argues that the deliberate approach of the British was part of a doctrine developed principally by Montgomery and that by and large, the operations progressed as intended. Like French, Hart contends that the British understood their own strengths and weaknesses and played to the former whilst trying to mitigate the latter, although he is perhaps more critical of the army's abilities.⁶⁶ Like many other commentators, Hart argues that the British approach was very largely shaped by their involvement on the Western Front between 1914 and 1918.⁶⁷ He places this experience at the centre of Montgomery's conception of warfighting which Hart sees as driven by the need to conserve morale and keep casualties within certain limits.⁶⁸ He argues that this was a positive and realistic approach that paid dividends.⁶⁹

One particularly influential voice within this British revisionist movement is John Buckley. His *Monty's Men* (2013)⁷⁰ is in many respects a summation of his previous papers and books about aspects of 21st Army Group from the preceding ten years.⁷¹ *Monty's Men* considers the performance, leadership and doctrine of the British forces in Europe from D-Day through to VE Day.

⁶⁴ Place, p.168.

⁶⁵ Stephen Hart, *Colossal Cracks* (Mechanicsburg PA: Stackpole, 2007). Based on his 1995 PhD thesis. ⁶⁶ Hart, pp. 26, 177-78.

⁶⁷ See David French, *Raising Churchill's Army*, Alan Allport, *Browned Off and Bloody Minded: The British Soldier Goes to War 1939-45* (London: Yale University Press, 2015).
⁶⁸ Hart, p. 40–41.

⁶⁹ Ibid, p.180-81.

⁷⁰ John Buckley, *Monty's Men* (London: Yale University Press, 2013).

⁷¹ See for instance, Buckley, *British Armour in Normandy Campaign 1944* (Abingdon: Cass, 2004).

The book has been described as 'a balanced study that stresses the British Army's effectiveness',⁷² but some critics have noted that Buckley possibly overstates some of his arguments.⁷³ *Monty's Men* does, perhaps, show an insufficient level of acknowledgement of the significant failings of some British formations alongside an emphasis on the 'colossal cracks' approach which belies the real tactical innovation occurring in parts of the army. Nonetheless, Buckley's contentions can clearly be supported and are an effective antidote to the arguments that dominated in the eighties and nineties. He emphasises the effect of the 'manpower crisis' on the thinking of the army's leadership and asserts that British stress on logistics and technical support was entirely correct and proved to be very effective. He concludes:

The performance of the British army in 1944-45 was impressive. It matched resources with objectives, developed proficient fighting power sufficient to overcome the enemy, and delivered a victory to the British state that has for too long been downplayed by the passage of time.⁷⁴

Similar arguments have been advanced by Ben Kite⁷⁵ who contends that the British and Canadians, far from being tactically unsophisticated and lacking enthusiasm for the war, were part of 'an institution that inflicted the greatest defeat on Hitler's armies ... in the West.'⁷⁶ He maintains that the British were efficiently organised, well led and tactically and operationally innovative. Like the work of Buckley, Kite's writing forms part of a body of recent British and Canadian scholarship that increasingly states that the Anglo-Canadian forces were in fact superior to their German opponents in a number of key aspects. Ben Kite, Terry Copp and John Buckley all assert that the British and Canadians excelled in the areas of logistics and operational planning and that their artillery was

⁷² Diane Lees (Director General of the IWM) writing in *The Times* on 20th December 2014, retrieved from www.thetimes.co.uk [December 8th 2022].

⁷³ For example, David Silbey, review of Monty's Men in *Journal of British Studies*, Volume 53, Issue 4, October 2014 pp. 1074-76 and Mark Celinscak, review in *Michigan War Studies Review*, October 2014, Issue 102, <www.miwsr.com/2014-102.aspx.> [Retrieved December 8th, 2022]. Importantly, both reviews are positive overall.

⁷⁴ Buckley, *Monty's Men*, p. 303.

⁷⁵ Ben Kite, Stout Hearts: The British and Canadians in Normandy 1944 (Solihull: Helion Press, 2014).

⁷⁶ Kite *Stout Hearts* (2014) p.18.

superior to that of their enemies in terms of equipment, techniques and doctrine.⁷⁷ They also argue that these armies were both more enthusiastic about fighting than has often been portrayed and more skilled at this on the tactical level than they have been given credit for.⁷⁸ The validity of these assertions is examined in this study. One area which seems to have received very little attention in the literature is the degree of variation between individual formations and indeed units. This study argues that this was significant and that the reasons behind this are important factors in developing a detailed and authentic understanding of the culture and performance of the British Army during the Second World War. One issue obscuring a clearer and more realistic assessment, already alluded to here and encapsulated in the earlier quote from Terry Copp, is the question of the scale and level that have been the primary focus of most studies to date.

The overwhelming focus of study in both published works and PhD theses has been on the divisional level and above; the books discussed so far demonstrate this point effectively. However, there has been some movement towards refining this to examine a lower level in recent years notably in Andrew Holborn's *The 56th Infantry Brigade and D-Day* (2010), Tracey Craggs's 'An Unspectacular War? Reconstructing the History of the 2nd Battalion East Yorkshire Regiment in the Second World War' (2007) PhD thesis and Arthur Gullachsen's 'Destroying the Panthers' (2016). All three works are tied firmly to the brigade or battalion level and offer considerable insight into the dynamics involved in these organisations. Gullachsen's work, which is focussed on a single SS

⁷⁷ Buckley, *Monty's Men*, pp.301-02, Kite, p.406, Terry Copp, *Fields of Fire*, Chapter 10.

⁷⁸ Buckley, ibid, pp. 302-03. Kite, p. 408.

⁷⁹ Aside from the books already discussed, it is easier to mention those which focus on the brigade or battalion level. Examples include Peter Wood, 'A Battle to Win' (unpublished PhD thesis, Massey University, NZ 2012) which examines a single New Zealand infantry battalion during the Second World War, and Bryce Fraser, 'The Combat Effectiveness of Australian and American Infantry Battalions in Papua, 1942-43' (unpublished PhD thesis, University of Wollongong, Australia, 2013). The latter investigates a small number of US and Australian battalions. Outside of British and Commonwealth forces see Jack Didden, 'Fighting Spirit' (unpublished PhD thesis, Radboud University, the Netherlands, 2012). This appraises *Kamfgruppe* Chill, a German ad hoc formation of roughly brigade strength.

⁸⁰ Andrew Holborn, *The 56th Infantry Brigade and D-Day* (London: Continuum Books, 2010).

⁸¹ Craggs, Tracey, 'An Unspectacular War? Reconstructing the History of the 2nd Battalion East Yorkshire Regiment in the Second World War' (unpublished PhD thesis, Sheffield University, 2007).

⁸²Arthur Gullachsen, 'Destroying the Panthers: The Effect of Allied Combat Action on I./SS Panzer Regiment 12 in Normandy 1944' in *Canadian Military History* (2016) Vol. 25: Issue 2, Article 13.

Panzer Regiment in Normandy, demonstrates that a new understanding of factors influencing tactical fighting's effectiveness can emerge from the detailed scrutiny of smaller groups. He is able to show that the German Panther tank was somewhat more mechanically reliable than the literature has previously claimed and that substantial losses to the unit had been inflicted by innovative and effective anti-tank tactics practised by the Canadian units facing Regiment 12. These important details had not been visible when studies were conducted at higher levels. However, these works clearly remain in a minority and, whilst those named here have been referenced for this work, there is generally little in the way of attempts to tie conclusions back into the larger debates around doctrine and performance in the British or Canadian Armies. This study will endeavour to do that for 4th Armoured Brigade.

Works examining the broader issues of military and combat performance and cultures within military organisations form the last group to be surveyed and the one that seems hardest to marshal into a coherent narrative for reasons that will soon become apparent. It would not be at all unreasonable to begin an examination of these works well before the modern era. Warfare is one of the most dangerous and challenging activities undertaken by human societies. War is an act of violence which in its application knows no bonds¹⁸³ and one in which it is 'difficult for normal efforts to achieve even moderate results'. ⁸⁴ It is 'the locomotive of history' ⁸⁵ and has fascinated historians since at least the Iron Age. Thucydides and Vegetius ⁸⁶ both wrote on the subject. More detailed and systematic approaches emerged in the 18th and 19th centuries, principally in the work of Antoine-Henri Jomini ⁸⁷ and Carl von Clausewitz. ⁸⁸ The influence of the latter in particular is very hard to over-emphasise in the study of theories of both military and fighting effectiveness and theoretical

⁸³ Carl von Clausewitz, *On War*, (Ware: Wordsworth, 1997). Originally published in German in 1832.

⁸⁴ von Clausewitz, On War, p. 66.

⁸⁵ Attributed to Leon Trotsky; see Peter Clarke, *War: The Locomotive of History?* BBC History Magazine at www.historyextra.com [Retrieved December 8th 2022].

⁸⁶ See Thucydides, *The History of the Peloponnesian War* (London: Penguin, 1972) and Vegetius, *De Re Militari* Retrieved from Digital Attic <pw.ntu.no> [01/11/2017].

⁸⁷ Antoine-Henri Jomini, *The Art of War* (1805) Translated from French in 1862 and published in the USA. Digitized copy retrieved from <www.Archive.org> [01/11/2017].

⁸⁸ Carl Von Clausewitz, On War.

approaches to the nature of warfare. The vast scale of destructiveness of warfare in the twentieth century and the plethora of examples this provided caused a massive increase in work in this field. A range of historians, soldiers and social scientists have explored the area.⁸⁹ Despite this, Bruce Newsome, in a 2007 study of the subject, could still reasonably say that '[t]he capabilities and performance of combat personnel ... have no accepted measure or explanation. Some conventional measures, in fact, are misleading'.⁹⁰ This is certainly the case, as this thesis will show. Fighting effectiveness, the core of this study, refers to the ability of formations and units to deliver kinetic battlefield actions that support the aims of their army and government.⁹¹ There are both simple and complex attempts to define fighting effectiveness. The modern British Army only defines it as 'mission achievement'.⁹² Between 1939 and 1945, it was not defined or even mentioned directly in Field Service Regulations (1935), although the idea can certainly be inferred from Volume III's outline of the 'Employment and Command of Armed Forces'.⁹³However, far more complex, model orientated measures exist.

No examination of this field would be complete without mentioning the work of Trevor Dupuy.

Dupuy, a retired US Army officer, produced his major works in the 1970s and '80s. His work is still frequently quoted and is of particular interest to this study as much of his source material was drawn from the Second World War. Dupuy created a system of analysis he called the Quantified Judgement Model (QJM) which was principally set out in his 1979 work *Numbers, Prediction and War.* QJM was a system of statistical modelling based on a range of factors, some of these were similar to those outlined above which related to the combatants: weaponry, morale and numbers.

Others were more environmental; terrain and weather. Via an undeniably complex system of

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⁸⁹ There is a vast range, including of course, Clausewitz and Jomini, but see, for instance, Tarak Barkawi, *Soldiers of Empire* (Cambridge: CUP, 2017), which applies sociological methodologies to understanding morale, cohesion and identity in the British and Indian Armies between 1939 and 1945. Also, Leo Murray, *Brains and Bullets: How Psychology Wins Wars* (London: Biteback Publishing, 2013) which uses approaches from psychology to understand tactical effectiveness and the will to fight. Both works are cited in this thesis.

⁹⁰ Bruce Newsome, *Made, Not Born* (London: Praeger Security International, 2007) p.2.

⁹¹ This very broad and simplistic definition is derived from the following: van Creveld, *Fighting Power* (Westport, CT: Greenwood Press, 1982) p. 3-4, Newsome, *Made Not Born*, p.2-4, *Joint Doctrine Publication: UK Land Power* (Shrivenham: Development, Concepts and Doctrine Centre, 2017), Chapter 3.

⁹² Army Doctrine Publication AC 71940.

⁹³ Field Service Regulations (1935), Volume III, Chapter 1.

equations, Dupuy claimed that his formula could produce the historically correct outcome for previous battles. Dupuy identified '73 separate combat variables'94 which he believed were the keys to making an effective model. One of Dupuy's key findings regarding the Second World War was that, according to the QJM, German units had 'consistent combat effectiveness superiority over the Americans and British' and, further, that 'on a man for man basis, the German...soldier consistently inflicted casualties at about a 50% higher rate than they incurred from the opposing British and American troops'95 and that this applied in almost all tactical and operational circumstances. Similar conclusions were also drawn by Martin van Creveld in his book, *Fighting Power* (1982), in which he used similar methodologies to Dupuy and acknowledged his influence.96 However, as David French has written 'Dupuy's work provoked a lively and critical response, aimed in particular at his methodology.97 He goes on to contribute to the critical response by stating that Dupuy's sample group is relatively small and that his sample of British units is even smaller, and, just as importantly, rather unrepresentative. The sample over-represents infantry formations at the expense of armoured divisions 'the most powerful formations in the army'98 which formed close to a quarter of Britain's total divisions.

From the point of view of this study there is another problem with Dupuy's methods and conclusions. The smallest formations he considered were divisions and this provides very little help at brigade level let alone at battalion level, because the larger scale tends to produce a homogenous view. As one American commentator has argued, 'The problem is that Dupuy is observing high-level behaviour (e.g., large military forces composed of thousands of individuals in conflict) and attempting to construct a high-level model for their actions without any tie-in to the

⁹⁴ Trevor Dupuy, *Numbers*, *Prediction and War* (Virginia: Hero Books, 1979) p.32.

⁹⁵ Cited in Hastings, Overlord p.231.

⁹⁶ Creveld on debt to Dupuy, *Fighting Power* pp. 5-6. Creveld's decision not to include prisoners taken as casualties when calculating the relative abilities of opposing sides seems to wilfully ignore important factors in the fighting in the West.

⁹⁷ French, Churchill's Army p.8.

⁹⁸ Ibid.

underlying behavioural phenomena that drive war.'99This reliance on 'big picture' approaches is widespread in the literature but seems to miss some significant issues inherent in modern warfare.

It is important to point out that in most land warfare of the twentieth century, only a small proportion of the troops engaged at any one time were actually at the 'tip of the spear', that is, in direct contact with the enemy. Of these, as S.L.A. Marshall famously observed, only about 25% may have been actively fighting in most armies. 100 It should be noted that Marshall's statistical findings have been robustly challenged in recent years¹⁰¹ but that his contention that there were a significant number of 'non-participants' in Second World War combat is still widely accepted. 102 Indeed, Sydney Jary observed something very similar in Eighteen Platoon although he referred to a much smaller proportion of his men.¹⁰³ This 'sharp end' was a place where small groups or even individuals could, and did, have a disproportionate effect on the broader outcome. It was also a place dominated by the infantry, in terms of numbers and staying power if not in terms of ability to inflict casualties or destroy materiel, and they took the largest share of the casualties as a result.¹⁰⁴ In the last twenty years, research into these issues has increasingly focussed on approaches that are psychological or rooted in group dynamics. These have offered relatively new but robust methodologies and models to examine ideas such as morale, cohesion and resilience which have dominated the discourse on the performance of military units for centuries. The ability to continue functioning effectively under immense stress for prolonged periods has emerged as perhaps the key factor. It is how this ability arises and what mental, emotional and physical assets combine to form it that is at the heart of the issue. The concepts and models underpinning this are examined in the section of

⁹⁹ Fred Kennedy, 'Heuristics, Anecdote and Applying Art' (2009) United States Army War College Paper p.30. ¹⁰⁰ S.L.A. Marshall, *Men Against Fire* (Unknown: Eumenes Publishing, 2019) Kindle edition.

¹⁰¹ See Robert Engen, 'Killing for their Country' in *Canadian Military Journal Online* (October 2008), http://www.journal.forces.gc.ca/vo9/no2/16-engen-eng.asp, [retrieved January 10th 2023] and Leo Murray, *Bullets and Brains*, Chapter 2.

¹⁰² A good summary can be found in, Dave Grossman, 'S.L.A. Marshall Revisited' in *Canadian Military Journal* Vol. 9. No. 4. (2009), a response to Robert Engen's article cited above.

¹⁰³ See Jary, pp.16-20, 83-89. The issue is also discussed in some detail by Alan Allport in *Browned Off and Bloody Minded* pp. 205-06, 235-39, where similar conclusions are reached, although they are more in line with those of Jary than those of Marshal.

¹⁰⁴ John Ellis, *The Sharp End* (London: Pimlico, 1993) pp.158-63.

this work concerning morale but an overview of the research genre from which they have emerged is necessary here.

In the last two decades, there has increasingly been a trend in academic literature to apply models and concepts drawn from other disciplines to military organisations that existed in the past, most particularly, ideas arising from sociology and anthropology. This is part of a wider movement towards interdisciplinary and hybrid approaches driven principally by two things, 'The division of disciplines into specialized subfields ... [leading] to the development of hybrid specialties ... The fruitful point of contact is established between sectors and not along disciplinary boundaries. 105 Also, a growing recognition of the 'inherent complexity of nature and society'. 106 This has produced a number of interesting hybrid works in the military history field. David French's Military Identities (2005) surveyed the British Army from the early nineteenth century through to the early twenty first from a social and cultural perspective. 107 French identified factors of both long-term continuity and gradual and also sometimes abrupt change. He examined the impact of social class and social mobility on the make-up of the army over this period. French's work draws interesting conclusions, and these have informed this study. Red Coat, Green Machine: Continuity in Change in the British Army 1700 to 2000¹⁰⁸ (2009) by Charles Kirke, a former British Army officer turned anthropologist, also examines long-term socio-cultural trends within the army. Kirke states, 'The concept of the loyalty/identity structure with its inbuilt assumptions about "being the best" ... provides a useful tool with which to examine the social workings of a unit in the British Army at any time since at least 1700.'109 Kirke's work provides a convincing and constructive model for studies such as this. He focuses on the ways in which groups seek to define themselves and the way those groups seek to

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¹⁰⁵Mattei Dogan, 'The Hybridization of Social Science Knowledge' in *Library Trends* (1996) Vol. 45, No. 2, Fall. ¹⁰⁶ Allen Repko, *Interdisciplinary Research: Process and Theory* ((London: Sage Publishing, 2016). The growing understanding of complexity as a factor is also noted in Steph Menken and Machiel Keestra (eds) *An Introduction to Interdisciplinary Research: Theory and Practice* (Amsterdam: Amsterdam University Press, 2016).

¹⁰⁷ David French, *Military Identities* (Oxford: OUP, 2005).

¹⁰⁸ Charles Kirke, *Red Coat, Green Machine: Continuity in Change in the British Army 1700-2000* (London: Continuum Books, 2009).

¹⁰⁹ Kirke p.144.

'shape' their members, looking at the manner in which both formal and informal structures interact. These abstract concepts can be seen in concrete form in the accounts of 4th Armoured Brigade soldiers and can shed important light on concepts that are difficult to define and quantify, like morale and motivation, which are essential for this thesis. Kirke's work looks primarily at battalion and regiment level and is thus highly applicable in the current context. His rationale is persuasive: 'Looking at this small scale – and specifically at life at unit level – brings into focus the people, their aspirations, their attitudes and expectations. It allows us to understand why they behaved in the way they did.'¹¹⁰Dr Kirke has also kindly provided this researcher with advice on military anthropology more generally.

More recently, *Browned Off and Bloody Minded: The British Soldier Goes to War 1939-45* (2015) by Alan Allport has explored similar ideas. The approach is a more conventional social history one, but Allport has mustered a huge range of primary and secondary sources and produced one of the more thorough explorations of the area. On some levels the work would serve as a conventional history of the British Army during the Second World War and it could sit amongst the books listed earlier in this historiographical survey. However, Allport focusses skilfully and at length on the sociocultural issues relating to the army from the thirties onwards throughout the war period. One point he argues persuasively is that the period between the early 1920s and the mid-1930s was one of immense social change of a type not seen for many decades. This shaped the collective attitudes of the generation called upon to fight the war. He further states that 'the experiences of army service in the two world wars were very different from one another, even though they were separated by barely a guarter of a century'.¹¹¹

¹¹⁰ Kirke p.3.

¹¹¹ Allport, Browned Off and Bloody Minded: The British Soldier Goes to War 1939-45, p. xviii.

Unpublished Primary Sources

This study utilises both published and unpublished primary sources. The key documents are obviously the war diaries of the brigade and those of the various battalions and regiments within 4th Armoured Brigade. These are day-by-day accounts of the unit's activities between 1943 and 1945, and aside from the diary element, the documents also include operational orders, some maps, intelligence briefings and after-action reports. The majority of these (like the diary entries) are written by officers of the unit. War diaries were kept by all units from battalion size upwards; they were usually (though not always) completed by the intelligence officer or the adjutant. Those of corps and divisions to which the brigade was attached have also been used, as well as those of some other formations, for comparison. War diaries were intended to record events both for organisational learning purposes and for posterity. With an eye to the future, war diaries could sometimes be circumspect about events that might show the unit in a bad light. In addition, there was often little time to complete them and conflicting accounts to work from. Finally, the diary compiler chose what it contained. As Debra Ramsay has written:

Like much in the regulations [FSR] overall, the rules governing the War Diaries are simultaneously extremely specific and very general, and ultimately the decisions about what might be identified as important is left to the individual.¹¹⁴

Nevertheless, they remain a vital if sometimes patchy piece of the history of any unit. Other reports and guidance produced by the army and the War Office have also been used where relevant. This thesis will additionally draw heavily on training and doctrinal publications issued within the British Army during the war, principally the Military Training Pamphlets (MTPs), Army Training Instructions (ATIs) and Army Training Memorandums (ATMs). These comprised a series of training aids (in booklet format) issued to the army throughout the war which dealt with specific topics in detail. They

¹¹² FSR, Volume 1 covers this. *FSR, Volume 1 1930, reprinted with amendments*, (London: War Office, 1939). War diaries became institutionalised in the British Army in 1907 following the Second Boer War; for an examination of context and practices see Debra Ramsay, "Scribbled hastily in pencil": The mediation of World War I Unit War Diaries' in *Media, War and Conflict*, Volume 12, Issue 1, (June 2019).

¹¹³ FSR, Volume 1 1930, reprinted with amendments, pp. 280-82.

¹¹⁴ Ramsay, 'Scribbled hastily', p.5.

outline current tactical and operational doctrine and 'best practice' in the light of recent experience. The study examines how closely 4th Armoured Brigade's operations followed the army's doctrine. As this work will show, doctrine in the British Army of this period was a complicated area, particularly at the tactical level, and defining what comprised the 'official version' was not always easy. ¹¹⁵ Tactical doctrine was often rather vague by design and was subject to multiple interpretations. ¹¹⁶ As the second part of the thesis shows, it was sometimes completely replaced at the theatre and/or the army level. Where 'official' doctrine was completely ignored (and it will be seen it sometimes was), the study tries to ascertain how alternative practices became established and accepted.

There are also a considerable number of unpublished personal written accounts that have been used, including unpublished autobiographies, diaries and letters. Of particular relevance to this thesis are the extensive papers of Michael Carver¹¹⁷ and Edwin Bramall. In addition, small quantities of letters and diaries written by individuals who served in the brigade were obtained via the IWM and the regimental museums. Naturally, all of these sources have their strengths and weaknesses. Whilst those written or recorded nearer to the events will generally be more accurate in terms of chronology and location, some later material may be subject to a lesser degree of self-censorship, particularly around controversial events. There is also an important spectrum of involvement in the events which reflects the rank and role of the witness and the reasons for that witness committing the account to paper or tape, and this should also be taken into consideration. The thesis will attempt to highlight where any witness may have a specific motivation for expressing a particular opinion or interpretation. In addition, contemporary photographs and film footage can be useful to confirm details regarding how equipment was carried or used, adherence to uniform regulations and even details of terrain. The Imperial War Museum and the National Army Museum both have large collections which can be viewed online, and these were used extensively. This was

¹¹⁵ Place, *Military Training*, Chapter 2.

¹¹⁶ French, *Churchill's Army*, pp.20-22, 279-80.

¹¹⁷ Papers of Field Marshal Lord Carver, Box 1, IWM.

¹¹⁸ Papers of Field Marshal Lord Bramall, University of Buckingham.

particularly aided by the substantial collection of photographs taken by Jimmy Sale, an NCO and then officer in 3 CLY.¹¹⁹ Sale enjoyed a 'quasi-official' status as his regiment's and then brigade's photographer.¹²⁰

Oral History interviews

This study makes use of a large number of these oral histories. Some were conducted by the Imperial War Museum and are held in their sound archive and some were conducted by the writer during the research for this work. Additionally, a small number were obtained from the Second World War Experience Centre, the BBC and the Legasee Organisation. The study has been constrained by the available sources, and two units of the brigade are disproportionately represented, 2 KRRC (the motor battalion) and 44 RTR (one of the armoured regiments). In total, six of these relating to soldiers of 2 KRRC have been used, comprising three officers and three ORs. These include one officer and one OR who joined the battalion in the UK early in 1944 and the remainder who had joined them at various points in North Africa. This is a small sample from a battalion of just over 800 strong at most points. Four 44 RTR soldiers' interviews were used, 3 ORs and one officer. One of the ORs had joined the regiment at the outbreak of the war and served through to the end, reaching the rank of sergeant and receiving a Military Medal. Again, this is a small sample. However, the majority of those interviewed by the researcher had not been interviewed by anyone previously, which gives a significant degree of originality to this work. In addition, one interviewee served in the same tank crew as a soldier whose detailed contemporary diary was held by the IWM, allowing a unique degree of depth and detail around some events.

¹¹⁹ https://www.nam.ac.uk/series/sale-collection, [retrieved December 8th, 2022]. Also, 'Jimmy Sale and 3 CLY' online talk by Dan Taylor of the Kent and Sharpshooters Yeomanry Museum, National Army Museum, 08/04/2022.

¹²⁰ Dan Taylor, ibid.

Seeking out fresh interviews was inevitably constrained by the distance in time from events; the remaining veterans were in their eighties and nineties during the research period. However, these are fairly representative samples given the limitations of their size, and they are important as a way of adding detail and texture to the impersonal accounts of events found in many of the other sources. All of those interviewed by the researcher were fully aware of the nature of the project being undertaken and consented to the content of their interview being used in this thesis. All of the interviews were conducted at their home addresses. Due consideration has been given to any ethical issues raised by disclosures made and interviewees were never pressed to talk about any event if it appeared that recalling it was causing them distress. All other oral history testimony was obtained from public domain sources where similar considerations had specifically been made. The memories of individuals can of course be patchy or blurred; this has been considered, and wherever possible they were cross-referenced with other versions drawn either from other veterans or from the war diaries. Additionally, the interviews conducted by the researcher, and the approach to those obtained from other sources, were informed by methods drawn from the investigative interviewing of witnesses. 121 These methods allow a consistent and methodical approach to be taken and encourage the use of an investigative mindset. In one of the few recent academic studies of a single British unit during the Second World War, Tracy Craggs makes a compelling point:

By following the oral history route, interviewees could be asked what serving with the battalion was really like. Did the Regimental History reveal an accurate history of the battalion? What was missed from the Battalion War Diary, and what could the interviewees remember that could not be found in those short daily entries. In answer to this latter point, the interviewees were to provide a wealth of human detail, enlightening, entertaining, and sometimes tragic.¹²²

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¹²¹ A summary and current guidelines are at https://www.college.police.uk/app/investigation/investigative-interviewing/investigative-interviewing, [March 20th, 2023]. The researcher was previously trained in this area. ¹²² Tracey Craggs, 'An Unspectacular War?' pp.14-15.

This is exactly what was intended for this study and it proved to be the case. The broad range of sources consulted for this thesis, from war diaries to published works and participant interviews, provide a large pool of information from which to draw relevant data. This is essential to achieve the aims of this study, and these are set out next.

Aims

The aim of the thesis is to consider six research questions, which are set out below with their connected sub-questions. These questions have been chosen because they reflect areas where there are either gaps in the existing literature or where that literature is fundamentally divided on how or why particular outcomes occurred. This thesis aims to deepen and enhance the literature by proposing answers. The first question is what is 'fighting effectiveness' and how can one gauge this? As already noted, this concept has no accepted single definition and some definitions are mutually contradictory. The plethora of definitions offered are also seldom focussed upon a particular level of organisation or of war. This thesis provides a definition that is specific to a formation operating at the tactical and lower operational levels. It also aims to produce a simple but rigorous set of criteria to support the definition. The second question is how effectively did 4th Armoured Brigade perform in combat in Europe between 1943 and 1945? The connected subquestions are: How did its performance change and was this change evolutionary? And, importantly, how can one assess this? This assessment has not previously been attempted despite the brigade's membership of the small group of formations who fought in most theatres. Indeed, assessments of the fighting effectiveness of individual British formations during the Second World War are not at all common within the literature. The third question is what lessons were learnt around tactical methods, how did this affect the brigade's fighting effectiveness and how was lesson learning captured and disseminated? The thesis will assess 'lessons learnt' processes, looking at both the army and the brigade and at formal and informal practices. Whilst there is a substantial body of literature that looks at this at the army level, there is almost nothing looking at how this functioned within a formation between 1939 and 1945. 123 The First World War has received considerably more attention regarding 'lesson learning', 124 but assessments of single formations are still not common.¹²⁵ The fourth question is how was the brigade led and commanded, what factors

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 ¹²³ A notable exception is Charles Forrester, 'Montgomery and his Legions' (unpublished PhD thesis, Leeds University, 2010), which explores the area across a number of formations within 21st Army Group.
 124 Aimee Fox's *Learning to Fight* (Cambridge: CUP, 2018) is the most recent and most thorough assessment.
 125 Stuart Mitchell, 'An Inter-Disciplinary Study of Learning in the 32nd Division on the Western Front, 1916-1918' (unpublished PhD thesis, University of Birmingham, 2013).

influenced leadership styles and practices and how did leadership influence fighting effectiveness? Leadership is a popular subject with a huge literature, but regarding the British Army during the Second World War, the discussion has primarily focussed upon the commanders of armies and army groups. A second, smaller tier exists that looks at exceptional junior leaders, particularly those leading at specific, notable engagements. There is a distinct lack of coverage for 'day to day' leadership across the breadth of a formation. This thesis aims to provide this and to place leadership in a wider context of fighting effectiveness.

The fifth research question is how can the development of morale across the brigade in this period be assessed and how was it sustained? The related sub-questions are as follows: what sources are there? Was there much variation between the constituent units and if there was variation, why was this? Were lessons learnt around the maintenance of morale? What about motivation and how is this different from morale? The morale of the British Army during the Second World War is an area that has received much attention and there is an extensive literature. There are certainly works that have focussed on individual formations or units. However, these have chiefly paid attention to those whose morale was identified as problematic. Individual formations not afflicted by poor morale have received less attention. The final research question is a twofold one and will be related back to all of the questions already mentioned: how did changes in terrain and the opposing forces affect the operations and performance of the brigade? What was learnt from German practices? How did the brigade view opposing units and how were these views formed? How did the opposition view

¹²⁶ Leadership and command (expanded on later) are chiefly focussed on senior commanders in French, *Churchill's Army*, Hart, *Colossal Cracks* and Fennell, *Fighting the People's War*, to highlight just a small sample.

¹²⁷ This area is given more attention in Colvin, *Noise of Battle*, particularly p.134-274, which are very much focussed on junior leadership in two battles.

¹²⁸ The following give a flavour: *Morale of the Army 1939-45*, J.H.A Sparrow (1946) WO/277/16 TNA, Kew, Hew Strachan, 'Training, Morale and Modern War' in *Journal of Contemporary History*, Vol. 41, No. 2 (Apr. 2006) and Jonathan Fennell, *Combat and Morale in the North African Campaign* (Cambridge: CUP, 2011). ¹²⁹ See, for example, Anthony King, 'Why did 51st Highland Division Fail? A case-study in command and combat effectiveness' in *British Journal for Military History*, Volume 4, Issue 1, (November 2017) and Ethan Williams, '50 Div in Normandy: A Critical Analysis of the British 50th (Northumbrian) Division on D-Day and in the Battle of Normandy' (unpublished MA dissertation, US Army Staff College, Ft. Leavenworth, 2007).

the brigade's effectiveness and what sources are there for this? How important was topography as a producer of friction and how did the brigade respond? These two areas, terrain and the enemy, are fundamental, a position upheld by Clausewitz, Jomini, Dupuy and others. To ignore these would be to render the other questions meaningless.

This thesis will approach the research questions through the three key themes of tactical methods/performance (with the related process of lesson learning), leadership and morale. These themes are clearly interconnected to a significant degree. They are also tied into the concept of a 'learning curve' for the British Army and formations within it during the Second World War. This is already a fairly well-established idea within studies of the army during this period, 130 although it remains better known and understood in relation to the First World War.¹³¹ The British Army's own efforts to gather and analyse battlefield learning via the Directorate of Tactical Investigation form a critical part of the research in this work. 132 In addition, papers and reports about tactical problems and solutions prepared at unit and formation levels by the brigade and its peers are also central to this thesis. This study contends that this learning curve was less sluggish than many have argued but that it was also far more fragmented in its progress than is generally understood. This was a product of the rather insular and compartmentalised structure and culture of the British Army in this period, a factor which this study will highlight and explore. The three themes relate directly to the research questions, representing the key underlying factors which had a direct impact on fighting effectiveness. The nature and effectiveness of leadership, the process of successful lesson learning at all levels, the ability to deliver tactically sound operations (i.e., those that achieved their aims, and not at an excessive cost) and the morale of the formation. These headings can be used both at the unit and the formation level but still make sense when discussing 21st Army Group or indeed the British Army as a whole. Some central questions arise from this, such as how does this study define

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¹³⁰ Both French's Churchill's Army and Hart's Colossal Cracks explore this idea.

¹³¹ There is a large literature examining this theme, which has emerged since the 1980s: Paddy Griffith, *Battle Tactics of the Western Front: The British Army's Art of Attack 1916–18*, Brian Bond, *Britain's Two World Wars Against Germany*, specifically, Chapter 7, and Aimee Fox, *Learning to Fight*.

'fighting effectiveness' and how does it measure this? Can morale be measured? If it can, how can this be achieved? These are complicated areas where objectivity is often hard to establish and results are difficult to quantify. It is here that the study will look to concepts and models found across the social sciences that provide relevant and well-tested approaches. These will be outlined shortly.

As an organisation, 4th Armoured Brigade was neither typical nor atypical. It represents a clear grouping of brigade-strength armoured formations within the British Army which were used in an independent role.¹³³ There were also a smaller number of infantry brigades that were used in a similar way.¹³⁴ As noted earlier, this in itself can be used to shed light on certain aspects of British doctrine during the period, and this is explored. This study will examine the role envisaged for the independent armoured brigades, how this was set out in doctrinal and training materials at the time and how this played out in practice, primarily via 4th Armoured Brigade but with reference to some of the other brigades within Eighth Army and 21st Army Group as well. The brigade is of particular interest as its composition underwent only minor alterations during the period under consideration.¹³⁵ This allows broader changes in doctrine, equipment and tactical and operational methods to be shown against a near identical backdrop, allowing their impact to be more reliably observed.

It will also be important to set out some more general parameters and the terms used around these. The concept of 'three levels of war' is recognised worldwide and has been in use since the 1980s, although its roots go back much further. The levels are designated as tactical, operational and strategic. As the study of a single brigade, this work will largely focus on the tactical level. There will

¹³³ George Forty, Companion to the British Army 1939-45 (Stroud: History Press Ltd, 2009) pp.63-71.

¹³⁴ Andrew Holborn, *The 56th Infantry Brigade and D-Day* p.36-7 and David Fraser, *And We Shall Shock Them* (Kindle edition.) pp.364 and 557.

¹³⁵ See the chapter following this, Brief History of 4th Armoured Brigade.

¹³⁶ Refer to: https://shape.nato.int/default [12th March 2023], (NATO page on this) and Andrew Harvey, 'The Levels of War as Levels of Analysis' in *Military Review*, Army University Press, (Nov-Dec 2021), Vol.101, No.6.

inevitably and quite rightly be some overlap into the operational level. In terms of the definitions of these levels of warfare, this study will, for the purposes of both clarity and consistency, use those definitions currently used by the British Army. However, reference will sometimes of necessity be made to the definitions used by the British Army at the time as well. This is certainly not as clear and straightforward as one would wish but it does allow for a greater degree of precision and accuracy. The choice of the modern definitions results from the fact that, as noted, British doctrine in the 1930s and 1940s was not always clearly set out, and, crucially, it failed to fully recognise the operational level of warfare. A recent British Army definition of this is useful:

The operational level is the level of operations at which campaigns and major operations are planned, conducted and sustained to accomplish strategic objectives ... The operational level provides the link and gearing between strategic objectives and the tactical employment of forces. ¹³⁷

Another modern study notes: 'The operational level is the vital link between tactics and strategy.' Ignoring the now well-established 'operational level' would be very difficult even though its use is, technically, ahistorical. The use of the anachronistic term allows the impact of, and actions taken at, the operational level to be identified and examined. As the thesis progresses it will become apparent that just because there was no specific term for an idea or activity in the 1940s, it does not mean that it did not exist. This work makes strenuous efforts to ensure clarity around the use of modern and period definitions and terms. The specific period that the study focusses on also requires some explanation.

The choice of the study's focus on autumn 1943 through to spring 1945 reflects a distinct period within the Second World War from the British point of view. This is the period of continued territorial advances, although they were sometimes slow or erratic ones, which led to an eventual victory. This

¹³⁸ John Kiszely *Thinking about the Operational Level RUSI Journal*, Volume 150, (2005) Issue 6, pp.38-43.

¹³⁷ Joint Doctrine Publication 01: UK Joint Operations Doctrine (London: MOD, 2014 edition), p.39.

was characterised by a series of large-scale offensives into German-occupied territory. At a lower level, it also begins with the period when 4th Armoured Brigade coheres as an independent armoured brigade with a stable composition. The preceding time spent in North Africa saw the brigade go through numerous organisational changes. North Africa was clearly important for the brigade; it would be easy to include this period within the remit of this thesis, and it is not hard to think of justifications for doing that. However, this has not been done for the following reasons: North Africa was clearly 'other' than the fighting in Europe. 139 The fighting there was conducted in a physical environment which bore little or no resemblance to anywhere that later European operations were carried out. In addition, both sides committed only relatively small forces to the theatre, in marked contrast to later campaigns, particularly those in North-West Europe. The geography of the region and its global location imposed an entirely different (though no less pressing) set of problems on commanders and formations within the theatre compared to elsewhere. Supplies were always at a premium and both sides largely operated by a thin logistical thread. 140 The distances involved were vast and frequently empty, imposing their own tactical and operational issues. The lessons of battles fought there often did not transfer into other theatres. The fighting in Italy, commencing in the autumn of 1943, is often grouped as part of the Mediterranean theatre and placed alongside that in North Africa. Both theatres were linked at the higher level because they were both under the direction of Allied Force Headquarters (AFHQ), established in 1942 to control Allied armies in the Mediterranean area, initially in North Africa. 141 Geographically, this made perfect sense. However, this thesis will demonstrate that in a number of key respects, the war in Italy was far more similar to the war in North-West Europe and forms a clear continuum with that fighting as far as both the British and the German armies are concerned. The key factors, discussed later, are terrain, climate and enemy force strength. However, the learning and experience that were hard won in North Africa were vitally important. They have rightly been defined

¹³⁹ French, Churchill's Army p.116-18 and Fraser, And We Shall, p.154-56.

¹⁴⁰ French and Fraser, ibid.

¹⁴¹ Montgomery, *Memoirs*, location 3626-3663 (Kindle edition) for a rather negative view of AFHQ's creation. For an overview see Colonel R.C. Mangrum, 'The Strategic Employment of Allied Forces in the Mediterranean During World War II' in *Naval War College Information Service for Officers*, Vol. 3, No. 10 (June 1951).

in these terms: 'North Africa is where British and Commonwealth forces learnt how to defeat the *Wehrmacht*.'¹⁴² As 'Desert Rats'¹⁴³ they were very much seen as part of 'Monty's Army', and the reputation of Montgomery and the formations of Eighth Army had a symbiotic relationship. Jonathan Fennell's research on Eighth Army has argued convincingly that Montgomery's personal effect on leadership should be returned to the central position it held in the immediate post-war period.¹⁴⁴ Both his personal impact on morale via its careful management and his grasp on the operational situation were crucial.¹⁴⁵

4th Armoured Brigade was a product of the climate he produced in Eighth Army. It was chosen to go to North-West Europe as one of the 'trusted' formations intended to stiffen the largely untried invasion force with experienced units. ¹⁴⁶He discusses his rationale for this in his memoirs:

The army then in England lacked battle experience ... officers did not understand those tricks of the battlefield that mean so much to junior leaders ... some very experienced fighting formations had returned ... from the Mediterranean¹⁴⁷

The desert war inculcated a certain culture in the units that served there. This thesis will show that these 'desert habits' lingered well into the campaign in North-West Europe and had a variety of effects, with both positive and negative outcomes for British military performance. However, primarily, units had extensive combat experience. This thesis will consider the sometimes-conflicting theories and data around this factor as an enhancer of fighting effectiveness. Performance, where the experienced formations of 21st Army Group are concerned, is a controversial area, at the time

¹⁴² Fennell, 'Steel my Soldiers Hearts' in *Journal of Military and Strategic Studies*, (2011) Vol.14, Issue 1 p.1.

¹⁴³ It is important to note that both 7th Armoured Division and 4th Armoured Brigade had an equal claim to this title and both used it. Chester Wilmot's BBC Unit Spotlight broadcast made this point. Transcript in 4th Armoured Brigade Papers, Tank Museum, Bovington. This is also reflected on the memorial at Thetford. Website for this: http://www.desertrats.org.uk/assoc/> [8th December 2022].

¹⁴⁴ Fennell, 'Steel', ibid.

¹⁴⁵ Fennell, *People's War*, pp.261-62.

¹⁴⁶ See the following quote by Montgomery that is also acknowledged in Buckley, *Monty's Men*, p. 44 and Allport, p.180-81.

¹⁴⁷ Montgomery, *Memoirs*, location 4001 (Kindle edition).

¹⁴⁸ About two thirds of the formations of 21st Army Group had spent 1941–44 in the UK.

and subsequently. Several of these were singled out as underperforming, particularly in Normandy. Most notable for the criticism they have received, probably because of their previous reputations, are 7th Armoured Division (a formation with strong ties to 4th Armoured Brigade) and 51st (Highland) Infantry Division. Both have been said to have suffered from a combination of overconfidence, leading to a kind of tactical naivety, and rather brittle¹⁴⁹ morale that rapidly flagged in adverse situations. This thesis argues that undue emphasis has been placed on the poorer performing of the experienced formations as part of a wider agenda espoused by D'Este, Hastings and others which is still repeated in some comparatively recent works. ¹⁵⁰ 5th Infantry Division, for instance, were also desert veterans and had been in Italy for longer than many of their peers. They fought successfully and without controversy in North-West Europe, ¹⁵¹ although they did not arrive until early in 1945 and thus missed the stern test of Normandy. 8th Armoured Brigade, another of the independent brigades, had also been in North Africa, although not Italy, and, again, were assessed to have performed well. ¹⁵² Nonetheless, it is undeniable that there were issues with other formations. ¹⁵³

This study will show that the issues of fragile morale and tactical naivety were not experienced within 4th Armoured Brigade. The formation's morale remained demonstrably buoyant throughout the North-West Europe campaign. In addition, the brigade's units practised tactical and operational innovation internally and, for the most part, were quick to adopt newly identified best practice from outside the brigade. The reasons for this are complex, and this thesis will explore, throughout its following three sections, the complicated interplay of multiple influences. Recent developments in the field of complex organisational theory, itself a synthesis of sociology, anthropology, psychology

¹⁴⁹ Stephen Hart *Colossal Cracks* p.25 and Max Hastings *Overlord* pp.177-78.

¹⁵⁰ See, for instance, Anthony Beevor, *D-Day: The Battle for Normandy*.

¹⁵¹ Another formation about which very little has been written. An overview of its convoluted history is contained in a veteran account at;

https://www.bbc.co.uk/history/ww2peopleswar/stories/61/a1109161.shtml, [Retrieved, November 10th 2022].

¹⁵² Buckley, *British Armour in Normandy*, p. 205 and Jack Didden, *Fighting Spirit* pp. 94-118. The brigade's status as veteran is more complex because two of its armoured regiments were replaced on returning from North Africa with new, untried units.

¹⁵³ French, *Churchill's Army* pp.138, 140, 142.

and elements of chaos theory, have informed this work. This is '[t]he concept of organisations as a complex system, capable of naturally evolving strategies, structures and processes and self-adjusting to changes in environment' as one exponent has defined it'. The elements of chaos theory such as the so-called 'butterfly effect' (which originated in meteorology) illustrate the ways in which comparatively minor events can have much more significant outcomes without the causal link being readily apparent. The more complex the system, the more likely this is. This idea is, of course, reflected to some degree as far back as the writing of Clausewitz. His emphasis on war's unpredictability is an acknowledgement of its complexity and chaos, the recent approaches to the idea have provided clearer and more constructive theoretical frameworks. An early exponent set out the key influences:

Historians argue about when warfare ceased being predominantly linear but, over the last century, the conduct of warfare has become more complex. Technology, the environment, and the enemy have driven this change. The result of continued study into systems, chaos and complexity theory has also changed our perception of the world from that of Newtonian reductionism to nonlinear models.¹⁵⁷

These concepts seem eminently transferable into the study of military formations engaged in operations, although they are currently not widely used in the field.¹⁵⁸ Indeed, there appears to have

¹⁵⁴ Amit Gupta, 'Insights from complexity theory: understanding organizations better', in *IIMB Management Review 21*, no. 3 (2009).

¹⁵⁵ David Byrne, Gill Callaghan, *Complexity Theory and the Social Sciences* (2014) Routledge, Abingdon, p.19.

¹⁵⁶ Carl von Clausewitz, *On War*, pp.10-11,19, 66-69.

¹⁵⁷ Paul Blakesley, 'Operational Shock and Complexity Theory' (a monograph for the US Army Command and General Staff College, 2005), p. 7.

¹⁵⁸ Complexity more widely, rather than in its organisational/operational sense, has been paid considerable attention in international relations studies and politico-military thought, particularly since the September 2001 attacks. For instance, Michael Beech, *Observing al Qaeda Through the Lens of Complexity Theory:* Recommendations for the National Strategy to Defeat Terrorism (unpublished MA dissertation, US Army War College, 2004).

been no use of the approach at all before 2005,¹⁵⁹ and it remains one that is only used by a small, though certainly growing, minority.¹⁶⁰

It is important to understand how all of this conceptual material fits in with the wider debate about British training and doctrine in the 1939 to 1945 period. It would be useful to pause briefly here and consider what is meant by doctrine. A 2010 training guide issued by the British Army summarises this neatly:

Doctrine is a set of beliefs or principles held and taught ... Doctrine turns the sum of subjective thinking into an objective guide for action ... Military doctrine provides the basis for education and training and underpins all military activity, in planning and execution. It helps to provoke thought and to organise how to think; not what to think.¹⁶¹

The need for the development and dissemination of doctrine had been understood by the British Army since at least the late nineteenth century. However, the subject remains controversial in the Second World War period. A number of modern studies have argued that the British Army had a poor grasp on tactical doctrine and reinforced this failing through poorly organised training. Consequently, local commanders largely evolved tactics 'to suit'. This was an inevitable result of real operations and was found in all armies. It was driven by success and failure, the abilities and personalities of leaders, new technology and changing terrain. However, it is argued that this had an

¹⁵⁹ One of the earliest specific engagements of complex organisational theory with military planning at the operational/tactical level appears to be in Paul Blakesley, 'Operational Shock and Complexity Theory', a monograph for the US Army Command and General Staff College (Ft. Leavenworth, 2005). Blakesley was an officer in the British Army at the time.

¹⁶⁰ For example, Alexander Frank, 'Complexity, Psychology, and Modern War' in *Small Wars Journal* (17/11/2015), Retrieved from <smallwarsjournal.com>, [December 8th, 2022] and Raisio, Puustinen and Jäntti, "The security environment has always been complex!": the views of Finnish military officers on complexity' in *Defence Studies* (2020) Vol. 20, No.4. The latter gives an account of the rising popularity of the approach and critiques its usefulness.

¹⁶¹ Army Doctrine Publication: Operations (Warminster: Land Warfare Development Centre, 2010) pp. 2.3-2.4 ¹⁶² Aimee Fox. Learning to Fight. Chapter 1.

¹⁶³ See, for instance, French, Raising Churchill's Army and Place, Military Training in the British Army.

unusually potent influence in the British Army because of its fragmented and 'tribal' nature. ¹⁶⁴ This study shows that, to an extent, this was also true for 4th Armoured Brigade. The influence of the brigade's two commanders (Brigadiers John Currie and Michael Carver) ¹⁶⁵ during this period will be examined in depth.

Overall, this work will seek to draw, where possible, conclusions about the way the British Army as a whole functioned from 1943 to 1945. This is because some processes within that army, particularly those around leadership and tactical practices and lesson learning, are still not understood with any precision. Doing this via the experiences of a single brigade will also highlight where those experiences are less applicable to or indeed entirely different from, in some cases, not just the majority of 21st Army Group but even the other independent armoured brigades within it. Importantly, in addition, the study acknowledges the fact that 'the enemy has a vote', and throughout, consideration has been given to German methods, organisation and equipment. The influence of German tactical and operational methods on British practices in the field has not had the degree of emphasis in the secondary literature that this researcher feels is warranted. Michael Carver, brigade commander from July 1944 onwards, was a keen student of enemy methods and seems to have been happy to adopt those that seemed useful, as will be shown. His prolific output of military history and theory from the end of the war into the 1990s also shows a healthy respect for the German Army of 1939–45. In addition, it exhibits a thorough knowledge of its methods though none of the zealous admiration seen in the work of other writers highlighted earlier in this chapter. 166 So, how will these multiple aims, addressing a variety of conceptual issues, be tackled?

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¹⁶⁴ Place, pp. 63-4, 95-6, and French, *Churchill's Army*, p.279-80.

¹⁶⁵ It should be noted that there was a brief period under a third brigadier, Hugh Cracroft, but this only lasted a little over three months and involved no fighting. This covered the period which John Currie spent as BRAC to 1st Canadian Army. Brigadier Cracroft went on to command 8th Armoured Brigade.

¹⁶⁶ For example, Michael Carver, *El Alamein* (London: Batsford,1962); his coverage of the German forces involved is balanced and accurate (he generally uses German unit and formation names) but he highlights weaknesses where he saw them. For example, Rommel pondering 'on the now monotonous theme of his supply situation', p. 73, on the ineffectiveness of German artillery in the battle, p.128, and on the inability to coordinate with the Italians, pp.177-78, 204.

Methodology

This study will approach the research questions through the three key themes of tactical methods/lesson learning, leadership and morale. This is, of course, a work firmly rooted in the discipline of history. The examination of primary source texts and the reference to eyewitness accounts are at the centre of establishing the facts required for the research questions. However, the nature of those questions and indeed the nature of recent trends in historical research¹⁶⁷ have prompted a wider-ranging methodology to be employed. The coverage of some areas has strayed into matters more traditionally associated with the disciplines of sociology, anthropology and psychology, and as such reference to secondary sources drawn from these has been made. This is particularly the case when examining intangible elements such as morale and leadership. These issues are widely acknowledged as vital to effective military performance of all types, including fighting effectiveness. 168 They are, nonetheless, hard to define in concrete terms and even harder to deconstruct to discover the social and cultural traits they arise from. The material looking at methods of assessing combat effectiveness and models for examining this thus considers statistical approaches such as those of Trevor Dupuy and Martin van Creveld and the more qualitative/experiential approaches based upon eyewitness accounts from both sides. As discussed earlier, a number of serious flaws have been identified in Dupuy's research in the last twenty years; however, his concept of 'combat variables' offers a plausible and relatively straightforward model for considering the factors that influence the outcomes of battles. Relative casualties on both sides. which are at the heart of Dupuy's and Creveld's methods, will not form the core of assessments but will certainly not be ignored either; the measure is useful but has problems. Casualty figures do not

¹⁶⁷ For instance, Charles Kirke's *Red Coat, Green Machine*, which mixes military history and social anthropology, or Terry Goldsworthy's *A Sociological and Criminological Approach to Understanding Evil: A Case Study of Waffen SS Actions on the Eastern Front During World War Two* (unpublished PhD thesis, Bond University, Australia, 2006), which uses techniques from psychology and sociology to examine the military history of the Waffen-SS.

¹⁶⁸ John Baynes, *Morale* (London: Cassel, 1967). See Chapter 4 for an overview of the importance of morale and leadership. Although the book is somewhat dated, he makes many important points and supports them with numerous examples from both World Wars.

exist for every engagement considered here, and for others they sometimes come only from one side or are obviously inaccurate. ¹⁶⁹ The position and posture of the units engaged at the end of the battle appear to be better indicators of effectiveness, and it will be seen how these have been factored into this study's fighting effectiveness metric shortly. The fighting effectiveness model diagrams, which will be seen in the conclusion of this work, tie these two elements together to give as complete a picture as possible with the available resources. Obviously, some measures of effectiveness, or at least components of it, are far more intangible than casualties or movement. These also require examination.

This work has drawn upon recent studies concerned with combat stress and/or post-traumatic stress disorder (PTSD) and morale and cohesion in military units. The reasoning behind this is simple: all three subjects have been convincingly identified as having a strong causal link to effective (or indeed ineffective) military performance in the secondary literature. To On the question of what exactly is meant by 'fighting effectiveness', 'leadership' and 'morale' and how these can be measured, this study has settled on a pragmatic hybrid approach. Where measurable factors exist that are clearly linked to the subject, they will form the main approach. For instance, when considering morale at unit and formation levels, incidences of psychiatric casualties (battle exhaustion), desertion and self-inflicted wounds are all strongly linked to poor morale, and the recording of these was, with certain provisos, covered later, fairly accurate. Thus, there is a measurable, statistically based method. Leadership, by contrast, offers few, if any, such opportunities. There are certainly models of what effective leadership 'looks like' or 'does', and these are utilised, but they don't offer the same kind of measurability. Here, whilst one may, in some circumstances, be able to draw inferences from statistics like those above, on the whole, the

¹⁶⁹ Multiple examples were encountered during the research. The fighting on the Sangro is accurately recorded in terms of British casualties in the brigade unit and corps war diaries; there is, however, no war diary for *65. Infanterie-Division* in this period and the corps records are insufficiently detailed. In other battles, the presence of multiple units from different formations within German *Kampfgruppen* also complicates the picture.

¹⁷⁰ Simon Wesseley, 'Twentieth-Century Theories on Combat Motivation and Breakdown', *Journal of Contemporary History*, Vol. 41, No. 2 (April 2006).

subjective opinions of those present comprise the main basis for assessments, although they are viewed through the lens of models of effective leadership.

The definition of fighting effectiveness used in this thesis has been selected on the following basis. Broadly, two main approaches can be identified from the literature that has emerged regarding fighting effectiveness in the last fifty years. These can be characterised as quantitative, or hard, and qualitative, or soft. The first relies on quantifiable data for the most part and uses mathematical models to reach conclusions, such as in Dupuy's work. The second relies on a more impressionistic approach that is rooted in the social sciences and based on observed or recorded behaviours and an understanding of what causes these. Since the 1990s, there have also been a number of studies that have attempted to mix the two approaches.¹⁷¹ This study follows that mixed path because it offers the most nuanced and flexible route. The working definitions used by modern armies, particularly the British Army, will also be of major importance. This is for two reasons. First, definitions of concepts such as fighting effectiveness are essential to the doctrine used by armies, and this drives their planning and training. Serious thought has been put into defining terms with clarity and indeed the utility of given terminology. Second, these modern concepts and their definitions are the product of earlier experience and lesson learning, particularly in the prolonged and highly intense operations of the two world wars. Currently, the British Army states that fighting power (that is, the capacity and ability to engage in combat) consists of three elements: 'a conceptual component (the ideas behind how to operate and fight), a moral component (the ability to get people to operate and fight) and a physical component (the means to operate and fight)'. 172 These three elements need to be combined to achieve fighting power and cannot create it in isolation. Other NATO countries use similar models. 173 The definition of fighting effectiveness is less

¹⁷¹ More recent examples include Andrew Wheale, *Ham and Jam: 6th Airborne Division in Normandy* (Solihull: Helion, 2022) and Bryce Fraser, 'The Combat Effectiveness of Australian and American Infantry Battalions in Papua, 1942-43' (Unpublished PhD thesis, University of Wollongong, Australia, 2013).

¹⁷² Army Doctrine Publication: Operations (2010) p. 2.2.

¹⁷³ For instance, *Netherlands Defence Doctrine* (The Hague: Netherlands Defence Staff, 2019). This uses the same three-component model defining them as the physical, mental and conceptual.

tightly delineated, and it is simply stated that it is demonstrated by mission success, although this has the important addition that 'success is a relative rather than an absolute commodity'.¹⁷⁴

The three elements of fighting power are a succinct and strongly credible construct, and as such, this study will utilise that model. This is reflected in the choice of key themes; morale and leadership reflect the moral element, lesson learning the conceptual, and tactical methods/performance both the physical and the conceptual elements. These are clearly only aspects of these wider headings but ones that appear particularly important in the context of this study. The approach to the physical elements requires a little more explanation here: the 'means to operate and fight' includes a wide range of elements and these vary depending on the level being looked at. This study focusses on the tactical and lower operational levels and as such is concerned chiefly with numbers of troops, numbers and types of equipment (including both vehicles and weapons) available, the efficacy of these tools and the ability to sustain them logistically with fuel, ammunition and parts. In addition, the way these resources are deployed and used overlaps with the conceptual and physical elements, and this is closely linked to the idea of tactical methods. New weapons or vehicles often allowed or encouraged new tactical approaches. More broadly, the physical element also encompasses those factors that impinged on the physical actions of operations, such as terrain and weather, and as will be seen, this also requires consideration. So, how will this thesis blend these elements to examine its core concern?

The definition of fighting effectiveness that this study uses is tailored to the tactical and lower operational levels. This is appropriate for the subject matter, although clearly it contains elements that would define fighting effectiveness across the 'three levels of war'. The definitions have been selected with peer or near-peer conflict at relatively high intensity in mind. Other factors would require consideration in, for instance, a counterinsurgency setting. Whilst its basis reflects the three

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¹⁷⁴Army Doctrine Publication: Operations, p. 5.7.

elements of fighting power, a decision has been made to focus more closely on particular constituents. This is because the research undertaken demonstrated that these specific subcomponents of the larger elements of fighting power were particularly important at brigade and unit level. Each part of this work will set out the evidence underlying its choice. The definition contains elements that encompass both the formation and the army, acknowledging that the smaller organisation must serve the greater to meet operational goals but additionally that its own survival is also of critical importance to the individuals that it is composed of.

In summary, this thesis will define fighting effectiveness as follows:

- The ability to achieve the tasks allocated where they are achievable.
- The ability to either avoid or modify tasking which is unachievable.
- The ability to remain functional beyond these tasks by avoiding heavy losses of personnel or equipment.
- The ability to maintain morale and motivation throughout these actions.
- The ability to learn tactical lessons and to produce improved performance via these.

Some further clarification of these points will explain the choices made and some of the wording used. 'Achievable' and unachievable' are highly subjective terms. No specific definition for them has been attempted and the only use of the idea is where personnel of the brigade expressed the opinion that a task was not achievable. This relates to the survival of the formation referred to above. There are a number of examples contained in this work, but the best known, which is referred to in several books,¹⁷⁵ is Michael Carver's refusal to commit the GREYS to the attack on Hill 112 during JUPITER. ¹⁷⁶ This ability to 'manage upwards' was important for commanders, as part one of this thesis will show. As to what an achieved task might be, this again rests largely with the opinion of the brigade's leaders and their superiors and the previously quoted modern statement

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¹⁷⁵ For instance, Robin Neillands, *The Battle of Normandy 1944* (London: Cassell, 2003) pp. 214-15 and L.P. Devine, *The British Way of War in Northwest Europe 1944-45* loc.1185 (Kindle edition). ¹⁷⁶ Carver, *Out of Step*, p. 194.

that 'success is a relative rather than an absolute commodity'. These effectiveness measures will thus provide the metric against which overall fighting effectiveness will be judged within this thesis.

It is important to state here some of the parameters of this study. Whilst training will be considered to some extent, it is a large and complicated subject. This study focusses on the training conducted within 4th Armoured Brigade that was carried out either at the battalion or the regiment level or by the entire brigade. The rationale for this is straightforward. As the war progressed, infantry and armour basic training was increasingly centralised and thus homogenised so that every recruit's experience was broadly similar. However, as will be seen, units and formations retained considerable control over their own training, and it is here that this study will identify distinctive factors in the brigade's programmes which had a direct impact on performance. The thesis will discuss skills and knowledge throughout. It is necessary here to briefly explain what 'knowledge' and 'skills' mean in these contexts.

Knowledge covers a broad variety of both information and understanding which can sit anywhere from the personal/individual level through to the organisation-wide level. Understanding the principles of platoon battle drill or knowing how to service the engine of a Universal Carrier are both relevant but very different bodies of knowledge and understanding. The thesis will highlight how these fit into different situations and learning within the brigade. Knowledge informs and shapes the use of skills but they are not the same thing. Skills are the effective application of knowledge or understanding. The conversion of these into applicable proficiencies occurs via experience or training or both.¹⁷⁸ Skills can be broadly subdivided into 'hard', or 'physical', and 'soft', or 'cognitive', skills.¹⁷⁹ The chapters discussing leadership will consider a number of soft skills, areas such as

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¹⁷⁷ Army Doctrine Publication: Operations p. 5.7.

¹⁷⁸ For a good examination drawing on economics, sociology and psychology, see Francis Green, 'What is Skill? An Inter-Disciplinary Synthesis' in *Centre for Learning and Life Chances in Knowledge Economies and Societies*, UCL, Research Paper No.20 (2011).

¹⁷⁹ Green, ibid, who dislikes the terms hard and soft, and Arman Syah Putra, Dewiana Novitasari and others, 'Examine Relationship of Soft Skills, Hard Skills, Innovation and Performance: The Mediation Effect of Organizational Learning' (2020) in *International Journal of Science and Management Studies*, Volume 3, Issue 3.

communication and emotional intelligence, but the tactics and learning chapters will focus on hard skills, that is, those 'that produce something that can be seen ... [and which] ... Technical or practical tests can assess'. ¹⁸⁰ Training on explicitly technical skills such as mechanical repairs, driving and signalling are outside the remit of this work. Training to hone specific tactical skills such as marksmanship or fieldcraft will be considered, as of course will anything intended to teach the combination of these skills into tactical actions, such as, for instance, rehearsing drills for an opposed river crossing, a task undertaken by 4th Armoured Brigade a number of times between 1943 and 1945. ¹⁸¹ This position has been adopted for two reasons. First, individual units and formations had a limited input regarding providing the specific type of trade and technical training which largely occurred in basic training centres or specialist schools. ¹⁸² Second, the focus of this thesis is principally on the brigade's ability to deliver tactical-level fighting effectiveness, and whilst it absolutely cannot ignore areas such as logistics and administration, the emphasis must rest on kinetic effect.

Finally, throughout it has been necessary to include an element of straightforward narrative history to provide a context against which to set the analysis for the research questions and because the movements and operations of the brigade have not been widely written about and remain relatively unfamiliar even to people well versed in the Italian and North-West European campaigns. A short history of the brigade follows as the final section of this introduction.

This thesis will analyse the fighting effectiveness of 4th Armoured Brigade between 1943 and 1945 through an examination of leadership, morale and tactical lesson learning. It will attempt to establish which factors within the culture of the formation and the wider army influenced these elements and

¹⁸⁰ Putra, Novitasari, ibid.

¹⁸¹ WO 169/8861, the Trigno, Sinello and Sangro rivers. WO 171/601, Seine. WO 171/4314, Rhine and Aller.

¹⁸² George Forty, Companion to the British Army 1939-45 pp. 12-31.

show how they synergised into effective performance. It will also consider how technological and topographical influences had a bearing on these elements from the Allied perspective and through the actions of enemy forces. The study will highlight the inherently complex nature of the events considered and will seek to utilise models that allow a degree of critical analysis to be drawn from these complicated and chaotic events and interactions. This thesis will contribute to the wider understanding of the way in which some formations of Eighth Army and 21st Army Group were able to produce high degrees of fighting effectiveness.

A brief history of 4th Armoured Brigade

This study focusses on the period from autumn 1943 through to the end of the war in Europe. During this time, 4th Armoured Brigade had a stable composition which changed very little. This incarnation of the brigade will receive more attention shortly, but an overview of what went before is required to give valuable context. 183 The brigade was created in Egypt in June 1940 as part of the 7th Armoured Division, although at this point it was far smaller than a typical British brigade. British resources in the Middle East and Mediterranean were stretched almost to breaking at this point, and the brigade's early history reflects this. It was rapidly enlarged but the structure of both it and its parent division were altered repeatedly in 1941 and 1942. In early 1942, the brigade became 4th Light Armoured Brigade, still part of 7th Armoured. Its 'light' status reflected Eighth Army's lack of tanks at this point and it was chiefly equipped with armoured cars as an expedient. During this period, it took part in Operations BATTLE-AXE and CRUSADER, the Gazala Line fighting and the first battle of Alamein. After an extensive refitting and a period of training in September and October 1942, the brigade officially became an independent armoured brigade, although it initially remained under the command of 7th Armoured Division. Early in 1943, the brigade adopted its own insignia, the 'black rat' (jerboa), which was fittingly similar to, but distinct from, the red jerboa of 7th Armoured. The brigade remained in action for the rest of the campaign in North Africa. This was followed by deployment to Sicily (involving only some of its units) and then the Italian mainland.

The role of the independent armoured brigades has already been touched upon but it requires a little more explanation here. The primary role of the independent armoured brigades was to support infantry divisions. However, this role was also assigned to independent tank brigades. Confusingly, these were not the same as armoured ones; they lacked the additional infantry and artillery elements.¹⁸⁴ In addition, the tank brigades mostly used Churchills whilst the armoured brigades

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¹⁸³ What follows is chiefly based on Patrick Delaforce *Monty's Marauders* (1997), Robin Neillands, *The Desert Rats* (London: Aurum, 2005) and pages on <www.desertrats.org.uk> retrieved in July-August 2017.

¹⁸⁴ MTP No.41 (part 2): The Role and Organisation of the Armoured Brigade (February 1944) and MTP No.41 (part 3) The Motor Battalion (June 1943), both London: War Office.

mostly had Shermans. This was the result of complicated and poorly worked-out changes in British armour doctrine and procurement policies.¹⁸⁵ The armoured brigades within armoured divisions were paired with a motorised infantry brigade, and in theory at least, were intended to provide a powerful all-arms force. In practice, the infantry and armoured brigades in British armoured divisions 'often fought their own campaigns'.¹⁸⁶The difficulties the British encountered in securing effective infantry–armour cooperation will be returned to at length in this thesis. The independent armoured brigades were also chiefly intended to fight with infantry but were structured to have the capacity to fight as a small all-arms force in their own right too.¹⁸⁷ On occasion, they could also be added to armoured divisions to create a formidable, tank-heavy force.¹⁸⁸

During the campaign in Italy, the brigade was reorganised into the form it would take, with only minor changes for the rest of the war. This configuration will now be explored in more detail. 4th Armoured Brigade comprised five regiment/battalion strength units: 2nd Battalion King's Royal Rifle Corps (2 KRRC), The Royal Scots Greys (GREYS), 3rd County of London Yeomanry (3 CLY), 44th Battalion Royal Tank Regiment (44 RTR) and 4th Royal Horse Artillery (4 RHA). These were, respectively, the motor battalion (infantry), three tank regiments and the brigade's artillery. In addition, smaller sub-units of medical personnel, logistical troops and mechanics were part of the formation. In total, at full strength, the brigade contained about 5,500 personnel. Each of the main units was commanded by a lieutenant colonel. The brigadier commanding had a small staff based in the headquarters of the formation which also included some administrative and signals personnel. Refer to Appendix 1 for a full list of component units.

¹⁸⁵ Place, pp.147-50 and French, *Churchill's Army*, pp. 41, 96-106.

¹⁸⁶ Matthias Strohn, email to student, November 2012.

¹⁸⁷ MTP No.41 (part 2) The Role and Organisation of the Armoured Brigade (February 1944).

¹⁸⁸ For instance, the brigade's time attached to 11th Armoured Division in February 1945, WO 171/4314.

2 KRRC, the brigade's motor battalion, appears to have drawn its commissioned ranks largely from the traditional 'officer class', and seemed, perhaps surprisingly, to be able to maintain this to a considerable extent during the war. The Kings Royal Rifle Corps had been regarded as a 'smart regiment'189 since the late nineteenth century at least. The regiment's exclusivity is reflected in the number of senior officers in the army who'd begun their career in the KRRC. David French states that in 1910, 17.8% of senior officers 190 had served in the Guards, KRRC or Rifle Brigade (RB). By 1930 this had fallen, but not greatly, to 11%. 1911 Lord Bramall recalled that even in the thirties the nickname 'Black Mafia' was used to refer to the KRRC 192 (it later became better known referring to the Royal Greenjackets). This was a reference to their uniform and their supposed influence within the army. The Royal Scots Greys (GREYS) were a 'smart' cavalry regiment with numerous aristocrats among their officers. 193 They comprised one of the oldest regiments in the British Army and one of the last to use horses, not being mechanised until 1940. The regiment had a high profile with a strong identity. 194 One of the more unusual manifestations of this was the 'dapple' camouflage¹⁹⁵ that was used on the regiment's tanks and vehicles, which was intended to resemble the coats of their famous horses. 3rd County of London Yeomanry (3 CLY)196 was a pre-war TA regiment which recruited in London and the Home Counties; Yeomanry TA units were considered 'smarter' (they had originated as cavalry) but were certainly not in the same league as the GREYS or the KRRC. The regiment had seen early mechanisation, converting to an armoured car unit in 1920 and then further converting to tanks in August 1939. 44th Battalion Royal Tank Regiment (44 RTR) was a TA unit based in Bristol. It was initially an infantry battalion but was converted to armour during the frantic rearmament that occurred shortly before the outbreak of war. 4th Regiment Royal

¹⁸⁹ The notion of 'smart regiments' is discussed at length in French, *Military Identities*, Chapter 6 and Badsey, *Doctrine and Reform in the British Cavalry 1880-1918* (Aldershot: Ashgate, 2008) pp. 7-8.

¹⁹⁰ French defines this as major generals and above.

¹⁹¹ French *Military Identities* pp.168-9.

¹⁹² Lord Bramall interview, 11/05/2012, recorded by the researcher.

¹⁹³ See the Return of Officers each month in WO/171/842 GREYS War Diary 1944. The names are illuminating.

¹⁹⁴ The above is based on Kershaw, *Tank Men* (London: Hodder & Stoughton, 2008) pp. 66-67 and Carver, *Second to None* (Glasgow: McCorguodale, 1954) throughout.

¹⁹⁵ Well attested in photos from 1941 onwards. See IWM BU 5308 (IWM online collections) and NA 8276 (NAM online collections), for example.

¹⁹⁶ From July 1944 they became 3/4 CLY when they merged with the badly mauled 4 CLY of 7th Armoured Division. Both units were often referred to as the Sharpshooters.

Horse Artillery (4 RHA), the brigade's artillery, was a regular unit that was formed just before the outbreak of war, primarily using cadres drawn from British units based in India. Early in the war, John Currie, later the brigadier commanding 4th Armoured, was the CO of 4 RHA.

In July 1943, ¹⁹⁷ parts of the brigade participated in Operation HUSKY, the invasion of Sicily. 44 RTR and 3 CLY were detached from the brigade for this purpose. Whilst Italian forces on the island collapsed fairly rapidly, the small German contingent put up a surprisingly effective defence, causing greater than expected delays and casualties. However, the fighting on Sicily was nonetheless brief and fairly small scale; it lasted just over a month and the Germans only fielded four divisions (and initially, just two). In addition, Sicily in summer was climatically very similar to North Africa with terrain not dissimilar to that of Tunisia. When the entire brigade was next committed, in the invasion of mainland Italy, matters would be very different. 4th Armoured Brigade was landed in Italy on September 3rd, 1943. Eighth Army were sent up the eastern coast of Italy after landing at Taranto on the 'heel' of the peninsula to support the landings already ashore but under pressure on the west coast. The brigade then spent the next four months in Italy, pushing northwards relatively slowly through successive German defensive lines. In January 1944 it was returned to the UK to begin preparations for the invasion of mainland Europe.

For the first time, the brigade was separated from Eighth Army; it was used as one of the 'reliable' formations that Lieutenant General Bernard Montgomery had selected to stiffen the assembling 21st Army Group, which was overwhelmingly composed of inexperienced units. A period of training and reorganisation followed in Southern England. During this phase, considerable amounts of new equipment were received. One significant change was that the armoured regiments altered from

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¹⁹⁷ All of this section is based on the following: Delaforce, *Monty's Marauders* (1997), Carver, *History of the 4th Armoured Brigade* (Glückstadt, Germany: Privately published, 1946) Tank Museum, Bovington, and the following war diaries (all Brigade HQ) at TNA, Kew: WO 171/601, WO 169/8861, WO 171/4314 and WO 231/27.

having a mixture of Churchills and Shermans as their main tanks, and the brigade became an all-Sherman force with the exception of small numbers of Stuarts (smaller, light tanks) used for reconnaissance and liaison tasks. The brigade was sent back into action in the days immediately after June the 6th 1944. Throughout much of June it remained close to the landing areas, held in a defensive reserve for an expected German counterattack. 198 Initially, 4th Armoured Brigade had been scheduled to be permanently attached to 51st Infantry Division; this plan was quickly abandoned and it spent the rest of the campaign moving around 21st Army Group, providing support to several different infantry and armoured divisions. This pattern would be repeated for the rest of the war. The brigade was involved in the fighting around Caen, taking part in Operations EPSOM (during which Brigadier Currie was killed in action) and JUPITER, and then the operations aimed at the Falaise Pocket in August. Following this, the brigade was part of the rapid advance through Northern France and into Belgium that occurred in late August and early September. During this period there were few major battles and the brigade was repeatedly moved under the control of different British and Canadian divisions. Thereafter, in late September, the brigade participated in the efforts to break through to the Allied airborne landings in Holland as part of 30 Corps, although its role was not significant. 199 After this, the brigade, having advanced continually for two months, spent four months more or less static in Holland with elements of the formation being dispersed and moved around to hold or support parts of the frontline, in roughly the same area, as required. In late October it concentrated taking part in one of the few major battles of this period, the capture of Tilburg. In February 1945, the pace of operations accelerated again and the brigade was used in Operations VERITABLE and BLOCKBUSTER, the Allied offensives aimed at breaking into Germany in the Rhine-Maas area. This heralded a period of more intense operations with heavier casualties which continued into the spring of 1945, culminating in major battles in April at Neuenkirchen and Verden. The brigade continued operations up until the end of the war, although the pace and intensity decreased in the final weeks. 4th Armoured Brigade ended the war in Bremen.

¹⁹⁸ WO 171/601 4th Armoured Brigade HQ war diary, June. TNA, Kew.

¹⁹⁹ Delaforce, ibid, pp. 88-9.

This section has set out the story of the brigade during the Second World War to give valuable context to the analysis undertaken, particularly on the pre-autumn 1943 period, which is outside the studied window. It also provides a useful chronology for the reader's reference throughout. Three thematic parts now follow, each comprising two or three linked chapters. These align with the three key areas set out in the introduction. The first of these discusses leadership.

Part One 'A gentleman and fearless'*: Leadership and leaders

*KRRC Chronicle 1944, p.134. Obituary of Lt. Harry Dixon.

Chapter 1. Defining Leadership

Part one of this thesis, comprising three chapters, considers the role of leadership within 4th Armoured Brigade, across all levels of the formation, as part of the overall assessment of the brigade's fighting effectiveness. Specifically, it considers the research questions of the thesis through the lens of leadership and will ask how the brigade was led and commanded and what impact this had on fighting effectiveness. What common threads, if any, permeated the brigade's styles and methods of leadership at all levels? What factors influenced leadership styles and practices? In addition, and of necessity, this material will also examine the differences between leadership, command and management. These factors will be viewed through their influence on the elements of the fighting effectiveness definition used throughout this thesis.

In a formation such as 4th Armoured Brigade, as elsewhere in the British Army of the period, leadership, command and management (concepts to be discussed shortly) were primarily exercised by two main groups, officers and non-commissioned officers (NCOs). Within the battalions/regiments¹ that comprised the brigade, the commissioned (officer) ranks went from lieutenant to lieutenant colonel. The NCO ranks ranged from lance corporal to senior warrant officer (WO1). There were substantially more NCOs than officers in all units but the ratio varied; for instance, in 4th Armoured Brigade's Signals unit there were 3 officers and 164 other ranks (ORs), of whom almost half were NCOs.² By contrast, 2 KRRC had 40 officers, 150 NCOs and 665 riflemen in January 1945,³ slightly below its authorised strength but about average for the period examined here. In November 1943, the brigade consisted of 289 officers and 5,506 other ranks.⁴ Numbers fluctuated, but during the period July–September 1944, a time of significant casualties, the average

¹ The nomenclature for British units can be confusing. Individual infantry units were always battalions, armour could be referred to as a regiment or a battalion, and those drawn from the cavalry were always regiments. Unhelpfully, a regiment could also designate a group of battalions from the same cap badge.

² WO 171/602, TNA, Kew. The small proportion of officers and the larger proportion of NCOs were related to the unit's technical/trade function.

³ WO 171/5212, TNA, Kew.

⁴ WO 169/8861, Strength Returns, January 1945, TNA, Kew.

total strength of the brigade (excluding attached units) was 5,200 in all ranks.⁵ The differences between officers and NCOs are more complicated than they might at first appear and careful observation of these complexities can tell us much about how the army of the period functioned. The most senior officer in the formation was its brigadier, and this part of the thesis will look at the impact those individuals had. The differences between officers and NCOs and between leaders within different units will also be explored. However, first it is necessary to look at some definitions of leadership and the different, but linked, areas of management and command.

Leadership in military units engaged in operations has long been recognised as a vitally important factor in their performance. A 2012 British Army document states: 'Leadership is the life blood of an army'. The types of leadership, and who is providing them, are highly variable and complex; their influence is likewise complicated and is often hard to gauge. Yet an understanding of who is providing leadership and when will be vitally important to any study of the performance of a military formation such as 4th Armoured Brigade. These three chapters will consider the importance of leadership in generating or maintaining fighting effectiveness and the influence of leadership on the other factors considered in this thesis. They will show instances where what one can define as 'good leadership' had a concrete outcome in that it furthered one or more of the fighting effectiveness metrics used here.

These three chapters engage, unavoidably, with a number of disciplines and theories to try and establish how leadership worked in the brigade during the Second World War, and as such, there is a requirement to consider the 'conceptual architecture' underpinning this. Of necessity, this part of the thesis will look at psychological approaches to leadership and also at methods of examining

⁵ WO 222/959 14 Field Ambulance Medical Quarterly Reports.

⁶ One could start with Xenophon's *The Education of Cyrus* and *Anabasis*. The idea is discussed in John Keegan, *The Face of Battle* (London: Bodley Head, 2014) pp. 94, 297-98 and John Baynes, *Morale* (London: Cassell, 1967), pp. 109-10, 253.

⁷ Developing Leaders: A British Army Guide (Camberley: RMAS, 2014) p.1.

group cohesion and dynamics that are drawn from sociology and anthropology. These approaches offer well established and empirically tested models which are appropriate for use in the current area of study. These include models of 'good' or 'effective' leadership which can be used to evaluate the examples from the brigade. They also provide terminology which can be useful in establishing clarity around concepts. Recent literature in the social sciences has emphasised the complexity of large organisations and their interactions internally and externally whilst attempting to distil this into workable models. It has been proposed that leadership within complex organisations forms an additional layer of capability which can enhance or transform other capabilities. This seems to be a viable concept that can assist with the current study.

To further this examination, it will be essential to delineate the boundaries of leadership and management within a military formation. Both functions are important for the successful running of one; however, although the two elements are strongly interlinked, there are definite differences between them. Also, it is necessary to distinguish between command and leadership, although these two areas are even more closely entwined. An officer or NCO may be in command whilst offering little leadership, or an officer may, of necessity, have a small part to play as a leader whilst fulfilling a relatively important command role. This study will argue that whilst the almost interchangeable use of all three terms in some literature unquestionably incorrect, the areas are also not as separate as some of the specialist literature, especially that concerning leadership, suggests. In reality, the three areas share overlapping boundaries and common elements and are

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⁸ For an overview see David Byrne and Gill Callaghan, *Complexity Theory and the Social Sciences: The State of the Art.*

⁹ James Hazy, 'Measuring Leadership Effectiveness in Complex Sociotechnical Systems' in *E:CO* Issue 1 Vol. 8 No. 3. (2006).

¹⁰ Whilst those in this last group are admittedly very rare – limited, really, to officers with important technical posts who controlled combat resources but had little or no manpower such as artillery FOOs – this does show the complexity inherent in this area.

¹¹ College of Policing, Effective Supervision Guidelines (Ryton: College of Policing, 2021). The current version (2022) is clearer. Older versions were imprecise regarding the use of supervision, leadership and management.

often mutually reinforcing even though they have distinct differences.¹² This first chapter will set out the central concepts involved and give definitions for some key terms.

Leadership was succinctly defined as 'the process of influencing the activities of an organised group toward goal achievement' by Rauch and Behling in their influential 1984 study of the subject. This seems a workable definition that has a pleasing simplicity in the present context. The use of the term process is practical because it underlines the transactional nature of leadership. An 'organised group' in this context has a wide interpretation and can just as easily be an informal, unstructured crowd or a formal, structured organisation, provided there is some common goal or motivating need. Unmistakably, leadership encompasses a wide variety of styles and methods used for 'goal achievement'. These will vary hugely and will be influenced by both the character and the personality of the leader, the nature of the task being undertaken and the culture of the group/organisation they are working within. Context is paramount. Management is defined by the modern British Army as 'the allocation and control of resources ... to achieve objectives'. Peter Northouse gives a clear and specific definition of the differences between the two:

The overriding function of management is to provide order and consistency to organisations, whereas the primary function of leadership is to produce change and movement. Management is about seeking order and stability; leadership is about seeking adaptive and constructive change.¹⁵

This definition seems to be a sound starting point but one which requires some modification within this context. Leadership in a frontline military setting is also substantially concerned with persuading or compelling 'followers' to do things that they would not normally do, and this must be borne in mind, although the kind of 'constructive change' Northouse sets out is also part of the picture. The

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¹² For a summary of the main themes in the scholarship of this area in the last thirty years, see Peter Northouse, *Leadership: Theory and Practice (London: Sage, 2016)* p.13-15.

¹³ Rauch and Behling, *Functionalism: Basis for an alternate approach to the study of leadership* (Oxford: Pergamon Press, 1984) p.46.

¹⁴ CLM Policy Handbook, version 5.4 (Andover: Army Secretariat, 2018), p.1.

¹⁵ Northouse, p.13.

concept of 'followership' has received far more attention in recent years.¹⁶ It will be returned to shortly. Within this study, management will generally refer to the direction and control of administrative and organisational procedures within military units and formations.

Command is a more specifically military concept and is generally clearer cut. It indicates direct authority, legally established, at a given level within a military hierarchy, the degree of authority and responsibility varying with the rank of the holder of that command position. Obviously, as stated, leadership, management and command overlap to a certain extent in their practical application and individuals can exercise differing degrees of all three. The relative relationship of command, leadership and management also requires some examination. One can argue that management and command comprise the elements necessary for a unit or formation to function, that is, they are specifically task related, whereas leadership provides both the flavour, or tone, of those elements and, more importantly, the driving force behind the activities, effectively providing momentum. Good leadership will enhance activities, poor leadership undermine them, but many commentators strongly support the idea that leadership can introduce a transformative 'X-factor' to a group or organisation.¹⁷ The modern British Army certainly seems to favour this second approach in recent guidance on leadership which is directed at all ranks.¹⁸

What constitutes leadership and how this is delivered practically are again complicated areas which have seen intense theoretical debate in the last hundred years.¹⁹ 'Leadership remains an elusive and often puzzling phenomenon',²⁰ as Stephen Walsh argues. He goes on to highlight some of the more consistently cited factors, drawing on the historiography of the subject; intellectual agility and

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¹⁶ Langley Sharpe, *The Habit of Excellence* (London: Penguin, 2022),, p.93-97 and Northouse, *Leadership*, pp. 7, 118-19.

¹⁷ Walsh, 'An Historical Overview of Leadership' Sandhurst Occasional Paper No.18, (2014) p.11-13.

¹⁸ Army Leadership Doctrine AC72029 (Camberley: Centre for Army Leadership, 2022).

¹⁹ For a general overview of these debates in the 20th and 21st centuries, see Walsh ibid and Northouse ibid p.1-15.

²⁰ Walsh ibid p.1.

sound judgement predominate. Additionally, 'there is little doubt charismatic leaders can move people to transcend themselves', but even so, 'charisma is a tremendous asset to possess, but not a disastrous impediment if you do not'. ²¹ The British Army's recent leadership doctrine is surveyed by a serving British officer in Langley Sharpe's *The Habit of Excellence* (2022). The cornerstones of leadership are identified as values and standards, which, although comparatively recent in their expression, have deep roots because, 'much of the strength of the army's leadership culture can be explained by ... tradition ... history that offers inspiration and lessons from ... past successes and failures'. ²² The values and standards form 'a common ground on which leaders can build trust'. ²⁴ Sharpe argues that trust is rooted in 'the leader's example as a practitioner', ²⁵ that is, their professional skills and competencies, and as a 'critical exemplar', ²⁶ displaying self-control and moral courage, because the element of 'self-leadership' is also important. The critical nature of trust cannot be overemphasised. Michael Carver, writing on leadership in 1949 and distilling his wartime experience, argued:

The soldier recognises that good leadership helps him to survive, to win and to bring nearer the day when he can return to the routine of peace.²⁷

Good leadership is perhaps easier to recognise than to define, but this study will return repeatedly to the theme of trust and its importance within leadership's role as a motivating factor supporting morale which in turn is a key component of fighting effectiveness. It forms, as James Hazy argues, a meta-capability by enhancing existing capabilities and blending them together to form new ones. In the military context of exhausting and mentally trying circumstances, this leadership meta-capability also sustains soldiers, helping to maintain morale and solidarity amongst tired, confused

²¹ Ibid. p.13.

²² Langley Sharpe, *The Habit of Excellence* p.241.

²³ Sharpe, p.55. Values: Courage, Discipline, Respect for Others, Integrity, Loyalty, Selfless Commitment. Standards: Lawful, Acceptable Behaviour, Professional.

²⁴ Ibid.

²⁵ Sharpe, p.241-42.

²⁶ Ibid, p.242.

²⁷ Michael Carver, 'Leadership' (1949) Draft for an article submitted to the *Royal Armoured Corps Journal*, Papers of FM Lord Carver, IWM.

²⁸ Hazy, 'Measuring Leadership Effectiveness'.

and traumatised troops by drawing on group cohesion, reward motivations and discipline, all themes that will be returned to shortly.

One other concept within this area should also be discussed, albeit briefly. This is the notion of officership. Officership is not mentioned in current British leadership doctrine²⁹ but does appear in training materials from RMA Sandhurst and is prominent in both US and Canadian leadership doctrine.³⁰ Patrick Mileham has written perceptively on the subject: 'the two terms are corollaries each of the other ... officership is ... formal, objective, institutional, the position or rank of an officer'.³¹ In essence, officership is about the moral and ethical standing of the officer's position within the armed forces, an approach that requires the officer to take on certain moral responsibilities and to live or indeed die in a way that befits those responsibilities. The flavour and tone of this will change with time, and it was certainly somewhat different in the 1940s, but the concept is enduring and goes back at its deepest basis to medieval chivalry and the jus ad bellum.32 The predominance of particular intellectual concepts and world views at given times, and the stubborn persistence of some older ones, is important, as the following material shows. For instance, elements of an almost chivalric conception of military leadership were displayed by many KRRC officers. This was focussed on physical bravery, example setting and paternalism. This will be returned to later but the impact of the broader intellectual and cultural climate requires attention first.

The study of leadership by sociologists, psychologists and anthropologists during the twentieth and twenty-first centuries has created a huge plethora of models that examine how leadership works and definitions of key concepts.³³ It is important to be aware of the concepts and narratives that

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²⁹ Army Leadership Doctrine AC 72029 (Camberley: Centre for Army Leadership, 2022).

³⁰ Patrick Mileham 'Fit and Proper Persons: Officership Revisited', RMAS Occasional Paper No.10 (2012) pp.1-6.

³¹ Ibid, p.11.

³² Ibid. p.9.

³³ Walsh ibid and Northouse, *Leadership*, ibid p.1-15.

were dominant in the period examined. These dictated the intellectual landscape of the era and informed decisions made by politicians, civil servants and soldiers regarding military organisation, recruitment and training. They thus had a specific impact on the way leadership was viewed and exercised across the army. The 1930s and '40s were dominated by 'trait theory' approaches to leadership; these emphasised that leaders had certain innate personality traits which helped them to lead.³⁴ In many respects this was a refined version of the traditional beliefs that had dominated the army for centuries.³⁵ Leaders were the product of genetics and upbringing. This concept needs to be borne in mind when examining why choices were made regarding leadership. The pervasive nature of that intellectual landscape within which many senior figures in the army and War Office operated should not be underestimated.³⁶ However, it is also necessary to consider what leadership consists of in practical terms and how it might be measured as good or bad or, perhaps more usefully, effective or ineffective.

The great majority of leadership theories in the last eighty years have identified that leadership, where the leader is concerned, involves three key areas, 37 which this thesis will label as behaviours, attributes and skills, although other labels are used in some studies. The value of each of these varies depending on the theory, with some identifying one factor as key, and others arguing for combinations. Essentially, behaviours are what leaders *do* (or are seen to do), principally through how they behave towards others and the way they communicate. Attributes are traits or innate personality types, reflecting facets such as confidence or tenacity. Skills are professional or technical abilities or competencies. These would include both physical and cognitive skills, as discussed in the introduction. The most recent British Army leadership doctrine 38 defines this in a clear and practical way as 'what leaders are', 'what leaders do' and 'what leaders know'. The pre-

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³⁴ Walsh ibid and Northouse ibid p.19-32.

³⁵ French *Military Identities* p.321-22 and Allport, p.95-100.

³⁶ John Adair, Effective Leadership (London: Pan. 2009) p.65-70.

³⁷ Northouse, Chapters 2,3 and 4. He discusses the importance of traits (or attributes), skills and behaviours within the leadership literature from the 1940s through to the 2010s. The emphasis changes but all three are consistently seen as relevant.

³⁸ Army Leadership Doctrine AC72029.

war 'trait theory' clearly placed attributes in the key position whilst, for example, the 'skills approach', which appeared in the 1990s,³⁹ clearly centred on the skills of leaders, although this term was used in its widest sense.

The current British Army uses an action-centred leadership model in its leadership doctrine which is largely based on John Adair's work from the late 1960s onwards. Adair's functional leadership model and the army's action-centred model both use a three-circle Venn diagram as their primary illustration. Adair's diagram uses 'task', 'team 'and 'individual'. The army's model is more specific and defined: 'Achieve tasks', 'Build teams', and 'Develop individuals'. Both models contend that optimal leadership occurs where all three circles overlap. Whilst Adair recognises the importance of skills and, to a lesser extent, attributes, his main focus is on behaviours.⁴⁰ This model unquestionably illustrates important points regarding what leadership is and how leadership affects tasks. The chapter will return to these vital aspects, but, crucially, these ideas seem not to offer any model for the social and psychological mechanics of 'doing' leadership and the 'levers' that achieve this. A useful approach in the present context might be to consider what it is that those identified as leaders provide and how they do this. That is, to define the mechanics, the personal and organisational tools, of exercising leadership rather than looking at the factors which underlie the possession of the required qualities and how or why individuals can, or can't, lead. Importantly, these need to reflect the mechanisms of ineffective and effective leadership, concepts which will receive more attention now.

Bad leadership can exist in many forms. Any scenario where leadership is ineffective might be termed 'bad', but of particular interest here are those incidences where leadership has a discernible negative effect on performance. A lack of relevant skills/competencies can deliver poor leadership

³⁹ See, for instance, Mumford, Zaccaro and others, 'Leadership Skills: Conclusions and Future Directions' in *The Leadership Quarterly* Vol. 11 Issue 1 (2000).

⁴⁰ Adair, *Effective Leadership*, pp.3-27.

even where the leader's aims and methods fall within the positive models.⁴¹ This can be termed incompetent leadership. Perhaps more importantly, bad leadership can be toxic leadership, an area that has acquired a substantial literature in recent years. 42 Toxic leaders do not necessarily lack the relevant skills and can appear to be very capable.⁴³ However, their influence is malign because, even when striving to meet accepted team goals (and in fact they may well meet some of these), they are motivated by either narcissism or an over-competitive nature or have an intimidatory way of working, or indeed, often, a combination of these.⁴⁴ These factors cause organisational instability and demoralise followers. Genuinely toxic leaders are relatively uncommon in most organisations. Unsurprisingly, contemporary accounts that unambiguously identify toxic leadership are hard to find. Research carried out for this thesis has not found even one clear example from within the brigade. Others do exist, though, for instance in Stewart Irwin's account of a platoon commander in 1 RB in 1944 trying to lose a 'nervy' soldier on a patrol, being hostile and aggressive with Dutch civilians and beating up a captured German paratrooper. When challenged, the officer tried to 'get even' with those who did, giving them unpleasant or even more dangerous duties.⁴⁵ Whilst this research has identified several examples of leadership that was either barely adequate or actually incompetent within 4th Armoured Brigade, and these will be considered, nothing recorded comes close to the example above. There are many reasons why such evidence might not be recorded but those factors would apply equally across the army. Certainly, in the oral history accounts, diaries and letters from the brigade used for this work, criticism of officers and NCOs from subordinates or peers is relatively rare. Examples where specific criticism or praise was recorded will be used throughout the thesis. However, there needs to be consideration first of those specific 'levers', mentioned above, that allowed leaders to exercise leadership.

⁴¹ Ivana Milosevic, Stefan Maric, and Dragan Loncar, 'Defeating the Toxic Boss: The Nature of Toxic Leadership and the Role of Followers' in *Journal of Leadership & Organizational Studies*, (2020) Vol. 27(2) 117 –137. They make a clear distinction between the toxic and the incompetent.

⁴² Army Leadership Doctrine AC 72029 (2022) gives a good overview, pp. 2, 11-2, 13. Also refer to Northouse, pp.339-40.

⁴³ Milosevic, Maric, and Loncar, *Defeating the Toxic Boss*.

⁴⁴ Milosevic and others, ibid, and *Army Leadership Doctrine*, p.2,13.

⁴⁵ Stewart Irwin, 18210, IWM Sound Archive.

This thesis contends that leaders use three key components, or levers, in the exercising of leadership: persuasion/inspiration, coercion and example. These specific levers have been chosen because they reflects, amongst others, the thoughts of Field Marshal William Slim, who wrote, 'Leadership is that mixture of example, persuasion and compulsion which makes men do what you want them to do. '46 Similarly, Montgomery wrote that 'a leader cannot do without discipline'47 but must also 'have the character which inspires confidence'. 48 Despite being rooted in leadership guidance from the 1940s, these three levers still seem objectively plausible in the present. Individuals can provide all three of the levers, or a mix, or only one, and of course use different elements with different people as well. Once again, context is key. The importance of the three will vary with the rank and the time and place. All look different depending on the size of the group involved and the leader's relationship to its members. In military terms, this will usually represent rank and various sub-units, but, as this chapter will show shortly, not always. Despite this, they will always have certain common factors, e.g. they are unmistakably versions of the same thing. Each area will be illustrated with a very short example from 4th Armoured Brigade. They are as follows: Persuasion/inspiration – The promise of benefits following risk, such as the end of a threat to the group, the opportunity to rest or the awarding of decorations. Also, a call on a sense of duty and/or patriotism or a call on a sense of unit pride. The area would also include 'big picture' motivation such as ending the war more quickly. For illustration, on the Sangro in November 1943, 2 KRRC were to reprise their attack on Casa Casone, a fortified position. This followed a bloody and unsuccessful previous attempt. Junior officers had to explain to their platoons why they were 'going again'. The necessity for the second attack and the reasons why it would succeed were carefully

explained to the troops. 49 Individual officers were able to persuade and inspire men to fight again.

⁴⁶ Quoted in *Army Leadership Doctrine AC72029* p.1,1.

⁴⁷ Field Marshal Montgomery, *Notes on Leadership, Morale and Discipline* (London: War Office, 1958) p.10. RMAS Archive.

⁴⁸ Ibid. p.2.

⁴⁹ Ted Wood, interview with the researcher, 10/06/2012, and WO 169/10248. Discussed in more detail on p. 130 of this thesis.

Coercion – At its most basic, the threat of personal, direct violence, but more often the threat of social exclusion and stigmatisation and/or the threat of punishment within a legal framework. Some studies have argued that coercion is not a factor within leadership;⁵⁰ this thesis rejects that but notes that coercion must be seen as legitimate by most of the led⁵¹ and can never be used in situations where *everyone* requires coercing. For illustration, during operation JUPITER in July 1944, troops from 43rd Infantry Division began to fall back around and through elements of 4th Armoured Brigade. It was a chaotic situation. Michael Carver, the newly arrived brigadier and one or two of his other officers drew their pistols and physically challenged the retreating troops.⁵² This was a coercive measure of the most basic and violent kind. Officers from 43rd Infantry Division also drew pistols to threaten men who were falling back,⁵³ and after a short while, the retreat was halted.

Example – A leader showing others what to do; put simply, 'I'm doing it, you can too'. This in turn might perhaps lead to 'He's standing up, it can't be that dangerous' or similar thoughts of those being led. This can also apply to moral examples such as sharing rations or taking turns at unpleasant duties. Trust depends upon and evolves out of this. Michael Carver wrote, shortly after the war, that 'example is without doubt the most effective form of leadership ... far more powerful than words, letters or regulations'. ⁵⁴ For illustration, during the operations to break into Germany, Sergeant Doug Browne left his tank whilst under fire on several occasions to either reconnoitre an area or to clear a path through dense woodland for his Sherman. He put himself in greater danger than his crew and set a powerful example which appears to have had on impact on their behaviour. ⁵⁵

⁵⁰ Northouse ibid p.11-13.

⁵¹ Stanley Milgram, *Obedience to Authority* (London: Pinter & Martin, 2010) is still one of the best examinations of this.

⁵² Hastings, *Overlord*, p.288. Disclosed to Hastings in an interview with Carver. Witnessed by Sandy Stowe, 2 KRRC, letter to Toby Wake, Papers of Lord Bramall, Buckingham University. He doesn't name Carver, however.

⁵³ John Majendie (SLI) interview, 22925, IWM Sound Archive.

⁵⁴Carver, *Leadership*, p.6. Papers of FM Lord Carver, IWM.

⁵⁵ Discussed in more detail on page 131 of this thesis.

It is important to state that these three wide and simplified headings each cover a range of interrelated factors, and crucially these can include behaviours, attributes and skills. They are generalised indicators signifying large groups of influences upon the way leadership is delivered. However, it is obvious that the combination of achieving tasks, maintaining team (that is, unit or formation) morale and cohesion and of course supporting and developing individual soldiers to further the wider goals are a vital part of leading as well, and this idea will be returned to. The elements discussed here can be synthesised into what this thesis labels the elaborated effective leadership model. This can be seen at Figure 1. This model combines the modern army's what leaders are, know and do concept with the three levers model from this study and shows how these are influenced by, and are an influence on, organisational culture. The model shows the ways in which good leadership impacts on fighting effectiveness. Also, the chapter will demonstrate how these elements combined and the resources that were at the disposal of leaders within 4th Armoured Brigade to create these factors. However, it is now necessary to consider the wider context in which leadership was exercised.



Figure 1. Elaborated Effective Leadership Model

The Context: Military Leadership

Leadership in the military context, certainly in the combat arms in wartime, is extremely challenging. It makes exceptional demands on both the leaders and the led. As a result, it has some important and highly influential differences from leadership in most (though not all) other spheres of activity.⁵⁶ The brigade was engaged in combat operations for the majority of the studied period, and thus it is not unreasonable to place operational and battle leadership at the centre of this study. First and foremost, those in charge have to make decisions that are literally 'life or death', and this carries an immense psychological and moral weight. In addition, leaders have to compel or persuade their followers (meaning subordinates or indeed peers) to undertake activities that are, essentially, not in the human nature of most of the population. Specifically, they will ask people to put themselves in positions of intense danger and to carry out acts of extreme violence directed at other humans. There is a substantial, robustly researched body of evidence that shows that both of these activities are alien and unnerving for the majority of people.⁵⁷ Effective leadership is a significant factor which can enable this to be overcome;⁵⁸ this applies across the spectrum of what might be termed adequate leadership through to good leadership. Incompetent or toxic leadership, by contrast, will, at best, have no impact on performance or, more likely, an adverse one. Ineffective leadership will be used here to denote incidences where a leader's methods and behaviours have a negative impact on the group's capacity to achieve goals or to act in concert, encompassing both incompetent and toxic leaders. Effective leadership, by contrast, exceeds the minimum requirements, raising group motivation levels and enhancing cohesion. Where those positive

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⁵⁶ There are similarities with other high-stress and dangerous teamwork environments, notably firefighting and policing, which have evolved some similar ways of looking at both leadership and decision making. See, for example, Tom Dyson, 'The Military as a Learning Organisation: establishing the fundamentals of best-practice in lessons-learned' *in Defence Studies*, Vol. 19, No. 2, (2019), which discusses similarities in what he terms High Risk and Turbulent Environments (HVTE). Literature from HVTE or VUCA (Volatile, Unpredictable, Complex, Ambiguous) environments has been referenced throughout this thesis.

⁵⁷ For useful discussions of this evidence, see Leo Murray, *Brains and Bullets* p.23-35 and John Keegan, *Towards a Theory of Combat Motivation* in *Time to Kill* (1997) Addison and Calder (eds) (London: Pimlico.1997) p.3-11.

⁵⁸ Army Leadership Doctrine AC72029 p. 1,1-1,2.

impacts are minimal but there are no negative influences, the thesis will use the term adequate leadership.

In this study, leadership will be examined at the levels of the smallest groups (infantry sections, tank and gun crews) through to the level of the brigade. In terms of organisational leadership, this coincides with what John Adair and others call 'team' and 'operational' leadership,⁵⁹ which forms part of a widely used three-tier model, the top tier being 'strategic'. Team leadership involves no more than tens of people and relatively simple, linear responsibilities for leaders. Operational leadership involves larger groups; leaders here have more complicated relationships with multiple subordinates and peers. Whilst there are similarities, it needs to be noted that these levels of leadership do not map neatly onto the tactical and operational levels of warfare.

The work of Charles Kirke has already been mentioned several times. Kirke's studies of the British Army between 1700 and 2000 offer constructive models of how the formal and informal structures of units worked and the other influences that shaped this. Figure 2 below summarises the main ideas.

⁵⁹ Adair, ibid p.60 and De Church, Hiller and others, *Leadership Across Levels* in *Leadership Quarterly* Volume 21, Issue 6 (2010).

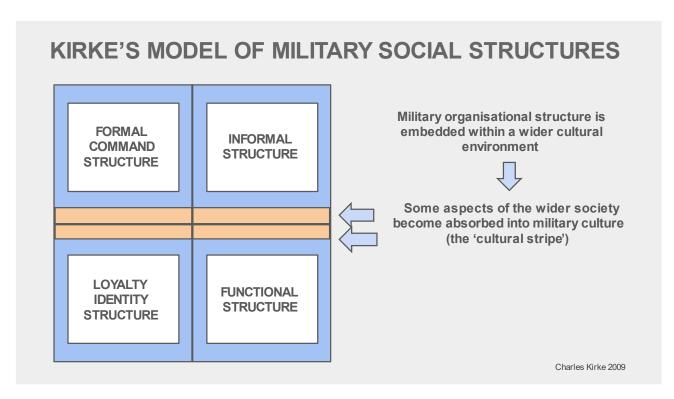


Figure 2: Kirke's four-part model of military social structures.

Leadership's Impact on Fighting Effectiveness

The specific impacts of ineffective, adequate and effective leadership (and the associated ideas discussed here) upon fighting effectiveness will now be clarified. Some of these impacts have already been alluded to. The metric used for this study places mission accomplishment, morale maintenance, casualty minimisation and the development of tactical skill at the core of fighting effectiveness of a formation. Leadership is obviously one of several factors which have an impact on these markers, as this thesis shows, and it will later consider their degree of influence relative to each other. Leadership appears to deliver three main impacts that can enhance or degrade fighting effectiveness. Its first, already noted, lies in morale and cohesion. Thomas Cheetham, analysing oral history interviews with 32 British veterans of the North-West Europe campaign, concluded, 'The positive recollections of the veterans of the role played by officers as well as NCOs strongly suggests that inspiring leadership was a vital component of good morale.'60 On the linked concept of cohesion, a United States army doctrinal publication stated in 1941 that 'cohesion within a unit is promoted by good leadership'. 61 The British Army of 1939-45 understood that morale was a critical factor and that good leadership could uphold or boost this; a 1940 document states that 'any officer whose work helps to sustain morale makes a direct contribution to fighting efficiency'. 62 Both morale and cohesion will receive much greater attention in part three of this thesis, and the impact of leaders will be revisited, but it is clear that they are both positively influenced by good, that is effective, leadership. All three levers can help to influence the positive effect on cohesion and morale and in turn, this effect reinforces the ability to use persuasion/inspiration on the part of leaders.

⁶⁰ Thomas Cheetham, 'An Analysis of British Army Veterans' Oral Testimony and the Campaign in Northwest Europe, 1944-1945' (unpublished PhD thesis, University of Wolverhampton, 2019) p.238. His sample draws from multiple units and ranks.

⁶¹ FM100 – 5, Field Service Regulations (1941), US Army publication quoted in Bryce Fraser, 'The Combat Effectiveness of Australian and American Infantry Battalions in Papua, 1942-43'.

⁶² ATM No.29. (London: The War Office, February 1940) p.14.

The second area that is vital to fighting effectiveness, and influenced by leadership, is confidence. As Lord Bramall noted, 'confidence is everything in war'. 63 This is linked, to a degree, to morale but the specific type of confidence discussed here is embodied mainly in decision making. What leaders know, that is their professional skills and competencies, is the driving force. The resulting effect is felt by both leaders and followers. Confidence amongst soldiers is critical to their willingness to enter combat and to remain in it. This is specifically confidence in the professional skills of their leaders and peers, as Bryce Fraser argues convincingly in his study of Australian and American infantry units in 1942 and 1943.64 Amongst leaders, particularly officers, this also includes a form of selfconfidence, that is, a willingness to make difficult decisions, often very quickly. Hazy identifies 'effective and timely decision making' as a key marker of good leadership. 65 This capability is dependent upon a combination of skills and attributes: those same technical/tactical competencies already mentioned alongside a good degree of cognitive resilience. This latter factor is important and will appear again in all three parts of this thesis. Cognitive resilience matters because '[m]ilitary personnel often perform complex cognitive operations under unique conditions of intense stress'66 and 'impaired cognitive performance as a result of this stress may have serious implications for the success of military operations'. 67 This has particular relevance to commanders at all levels because of decision cycles. These are models that have evolved since the 1980s to describe and 'fine tune' long-recognised processes whereby commanders develop and adapt plans, particularly when activity is ongoing. A very well-known model with a military origin is John Boyd's OODA loop used by the US Army.⁶⁸ These concepts have entered into use in other HVTE and high-risk areas, indicating the credibility and utility of such models.⁶⁹

⁶³ FM Lord Bramall, text of 'Speech to Platoon Commanders' (1984) given at Warminster when CDS. p.4. Bramall Papers, University of Buckingham.

⁶⁴ Fraser, 'Combat Effectiveness of Australian and American Infantry', pp. 26, 204, 241-42.

⁶⁵ Hazy, 'Measuring Leadership Effectiveness in Complex Sociotechnical Systems'.

⁶⁶ Andrew Flood, Richard Keegan, 'Cognitive Resilience to Psychological Stress in Military Personnel' in *Frontiers in Psychology*, Review, (March 2022). https://doi.org/10.3389/fpsyg.2022.809003.

⁶⁷ Flood, Keegan, 'Cognitive Resilience'.

⁶⁸ Observation/Orientation/Decision/Action. http://www.danford.net/boyd/essence4.htm preserves some now delightfully retro PowerPoint slides produced by Boyd to illustrate his model.

⁶⁹ See, for instance, https://www.college.police.uk/app/national-decision-model/national-decision-model.

A rapidly operating decision cycle based on sound judgement was a powerful tool for commanders, from the brigadier through to corporals leading sections or single tanks within 4th Armoured Brigade, even though no one would have recognised the term. The Royal Armoured Corps produced a guide for junior leaders in 1944 which features a section on 'decisions'.⁷⁰ This demonstrates that thinking about decision making and judgement was growing in both importance and sophistication during the latter part of the war. The pamphlet instructs junior leaders to use the already well-established 'appreciation of a situation' model employed in the British Army. It refers to appreciations as 'a mental drill'.⁷¹ The ability to plan effectively, to have good situational awareness, to manage risk and to adapt to changing circumstances, all whilst under pressure, was critical. It was a key enabler of tactical effectiveness, though as will be seen later, far from the only one. Leaders who mastered this were highly respected by peers and followers.⁷² Those who failed frequently to do this were not granted confidence and indeed had a negative impact on morale.

Leadership's final impact on fighting effectiveness lies in discipline and will. This is a less clearly defined area than the preceding two. Peter Wood, writing about New Zealand's army during the Second World War, argued that 'the will to fight is a greater determinant of combat effectiveness than previous experience'. This thesis takes a slightly different position on that specific point, but there is no doubt that 'will' is an important influence on fighting effectiveness, identified clearly by Clausewitz more than two hundred years ago. The national fighting power is defined in *On War* as the sum of 'available means and the strength of the will', and he returns repeatedly to the idea of the will as important in warfare. John Keegan argued that the will to fight was both crucial and

⁷⁰ The Royal Armoured Corps: Junior Leadership (Unknown: HQ Training Establishments, RAC,1944) Tank Museum Archive, Bovington.

⁷¹ The Royal Armoured Corps: Junior Leadership p.29.

⁷² The Royal Armoured Corps: Junior Leadership.

⁷³ Peter Wood, 'A Battle to Win: An Analysis of Combat Effectiveness through the Second World War Experience of the 21st (Auckland) Battalion' (PhD thesis, Massey University, New Zealand, 2012), p.330. ⁷⁴ von Clausewitz, *On War*, p.8.

complicated and that the side whose will faltered most usually lost.⁷⁵ He also noted that this will was usually upheld or enforced through discipline.⁷⁶ Lord Bramall, as CDS, characterised 'battle discipline' as slightly different to service discipline more generally, although acknowledging they were similar and interconnected.⁷⁷ Battle discipline, he proposed, is manifested in 'willing and instant obedience, attention to detail ... and sense of duty', and when it fails, units become fragmented and ineffective.⁷⁸ A British training manual from 1940 states: 'without discipline a collection of individuals remains nothing more than a collection of individuals and useless in war as a fighting weapon'.⁷⁹ The British Army of the Second World War fully understood the linkage of discipline and will as enablers of fighting effectiveness. Morale was likewise seen as critically important and the role of leaders in maintaining it as equally essential. The organisational environment provided by that army was of course a tremendous influence upon all units and formations within it. The next section considers how the wider structure and culture of the army affected leadership.

The Environment: The British Army 1939–45

This chapter will now consider the structures and institutions through which, and within which, the linked functions of leadership, command and management were exercised in the British Army of the Second World War. The Army of 1943–45, like any other 'long-lived' organisation, was the product of its history. Whilst it is relatively easy to trace some of the traditions and attitudes that informed the army's culture back to the seventeenth and eighteenth centuries, this section will concentrate on the developments of the previous twenty-five years. That is, from the outbreak of the First World War, a timeframe that was not only well within living memory but which also contained a huge and formative experience for the army in the shape of that conflict. The exact significance of that

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⁷⁵ Keegan, pp. 53, 60, 247-50.

⁷⁶ Keegan, ibid, later pages with particular reference to the Somme in 1916 and both British and German will.

⁷⁷ FM Lord Bramall, text of 'Speech to Platoon Commanders' (1984) Bramall Papers, University of Buckingham.

⁷⁸ Bramall, ibid.

⁷⁹ *ATM No.29*. February 1940, p.13.

experience and its lessons were still being debated within the army when the next major war broke out.⁸⁰

As has already been outlined, leadership was expected to come from officers and NCOs. Officers formed a smaller group but one with greater powers under military law and a traditionally more focal role in leadership, which was reflected within the very concept of officership. In this period, holding a commission was still strongly linked to ideas of class and social position, although increasingly, the nineteenth-century certainties around this were becoming less secure, a process which had begun during the previous war.⁸¹ Even so, in 1939 the social composition of the officer class across the entire army had in fact changed little from that in the late Victorian era. In that year, 84.3% of Sandhurst entrants had been to a public school.⁸² During the First World War, the make-up of the officer class had substantially altered, but this had proved to be on a temporary basis. This would of course change again once conscription and expansion resumed. Many pre-war officers were the sons of serving or retired officers (John Currie being a case in point),⁸³ almost forming something of a 'military caste', as David French has contended.⁸⁴ Michael Carver was slightly unusual; although his father had served as an officer during the previous war, he had not been a career soldier and his immediate family had no real links to the army beyond this.⁸⁵ Indeed, he seems to have opted to join up on something of a whim himself.⁸⁶

⁸⁰ David French, Raising Churchill's Army pp.13-15, 30-33.

⁸¹ Alan Allport, *Browned Off and Bloody Minded* p.96-98.

⁸² John Ellis, The Sharp End p.192.

⁸³ Other examples include, Aidan Sprot (GREYS); see *Swifter Than Eagles* p.1. Also, Toby Wake (2 KRRC); see letters to his father in the Papers of Lord Bramall, University of Buckingham and Gerald Hopkinson (44 RTR).

⁸⁴ French, David *Military Identities* pp.31-2 and 40-41.

⁸⁵ An older second cousin's window subsequently married the then relatively unknown Bernard Montgomery when Carver was 17. It appears that Carver and Montgomery didn't meet until North Africa however, *Out of Step*, Chapter 1, and p. 251.

⁸⁶ Carver, Out of Step pp.13-19.

Lord Bramall,⁸⁷ reflecting on the army of the early war years, felt that many pre-war regular officers were not particularly serious about their trade; he noted that the King's Royal Rifle Corps, the Rifle Brigade, the Royal Artillery and a few others were exceptions where "soldiering really came first". However, "so much of the rest of the army was what I call enthusiastic amateurs". He added that in the 1920s and 1930s there was no money for the army and that one effect was that it certainly didn't encourage professionalism: "Nobody disputed their bravery, or the fact they were prepared to lead from the front, but they were more interested in what went on around the profession rather than the profession of arms itself." This underlying element of the organisational culture had important effects on leadership.

Within 4th Armoured Brigade, one can also see differences in the backgrounds of officers and their leadership style between the individual units. This is unsurprising; the brigade was composed of battalions and regiments drawn from different 'cap badges' with different traditions and ethoses. In an organisation as 'tribal'⁸⁹ and compartmentalised⁹⁰ as the British Army of the Second World War there was inevitably great variation. The influence of this factor will be discussed in more specific detail later, but it is worth pausing here to mention the importance of the regimental system generally in defining the culture and structure of the British Army in the period. Even in the present, 'the regimental system creates a unique context for leadership ... [soldiers are thus] part of an institution within the institution'.⁹¹ In Britain, mass conscription did gradually but significantly reduce this variation, albeit slowly and never completely, in part due to the regimental system's ability to imprint identity.⁹² Nonetheless, the system was widely seen to have been put under great strain and substantially diluted in the last two years of the war.⁹³ Importantly, pre-war and earlier on in the war,

⁸⁷ All quotes in this paragraph from Lord Bramall, interview recorded with researcher, 11/05/2012.

⁸⁸ Lord Bramall went on to highlight social and sporting opportunities.

⁸⁹ Tribal is not used here in its anthropological sense but rather as an indicator of the blend of intense group identification and factional tensions that characterised the army of the period.

⁹⁰ For discussion of this see French, *Military Identities* (2008) Chapter 10, Anthony Beevor *Inside the British Army* (London: Random House,1990) Chapter 19 and Richard Holmes in *Time to Kill* ibid p.210-13.

⁹¹ Sharpe, p.44.

⁹² Sharpe, p.44-45, French, Military Identities, pp.2, 337-38.

⁹³ French, *Military Identities* pp.279-82.

regiments still had a large degree of latitude over who they recruited as officers. This continued to have an effect throughout the conflict, not least because the majority of officers above company or squadron commander level were products of the old system. In 2 KRRC on the eve of D-Day, the CO, second in command and adjutant plus one of the five company commanders were all officers who entered the army before the war or in its first year. 94 In the same week, of 14 Field Ambulance's ten officers, two had joined in the pre/early-war period. 95 Up until the Normandy campaign, every unit commander within the brigade was a pre-war regular soldier, and even by the end of the war, most still were. That selection system was 'haphazard and snobbish', 96 although, as John Ellis goes on to note, it was, rather surprisingly, a fairly effective system of selecting officers. Command Interview Boards were run by panels of three senior officers from the regiment concerned. As both Ellis and Murray note, the panels tended to select on the basis of 'recruiting in their own image', favouring the traditional public school idea of a potential leader, although clearly the degree of probing by the panel and the accuracy of (and indeed attention given to) the CO's report varied by regiment and individual panel members. 97

This was changed substantially in 1942 when a procedure 'loosely modelled upon the German system' was introduced, the War Office Selection Board (WOSB). These were panels comprising experienced officers and psychologists who assessed candidates over two days. These not only carried out interviews but also administered behavioural tests and group tasks. French argues that this had a 'positive impact on morale' as it was seen as a much fairer system. ⁹⁹ Public disquiet and indeed misgivings expressed by some senior officers about the quality and fairness of the

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⁹⁴ WO 171/1327, Field Return of Officers, week ending 29th April 1944. Additional details from the *KRRC Chronicle* 1940-44.

⁹⁵ WO 177/854, Field Return of Officers, week ending 29th April 1944. Unusually, the unit CO was not one of them.

⁹⁶ Ellis, *Sharp End*, p.192. Both quotes.

⁹⁷ Hugh Murray, *The Transformation of Selection Procedures* in Trist and Murray, eds., *The Social Engagement of Social Science* (London: Free Association Press, 1990). and Ellis, *Sharp End.* p.191-93.

⁹⁸ French, Churchill's Army p.74.

⁹⁹ French, Ibid.

recruitment and selection scheme early in the war had been pronounced. It was debated in parliament, with MP Jack Lawson saying "there is very grave question still in the minds of a number of people as to whether the quality of the officer is the test, or his social status, or the school he went to". 100 These concerns were linked in part to the general dislike of 'Blimpism', which in turn tied into popular attitudes about the previous war. 101 One key effect of the WOSBs was a significant reduction in the number of trainee officers 'returned to unit' from their commissioning courses. 102 So, it appears likely that WOSBs were better at weeding out unsuitable candidates than the previous system. A mark of their success was the rapid adoption of similar assessment boards by the Royal Marines, Royal Navy and National Fire Service. 103 Indeed, the current selection procedure for officers in the British Army still has many similarities with the WOSB. 104

There is a fascinating short documentary film on the subject of recruitment and selection for both specialist and officer roles made by the Army Film Unit in 1944¹⁰⁵ and clearly intended for public consumption. It is unmistakably intended to allay the fears of those about to be called up and the families of serving soldiers regarding the fairness and effectiveness of these processes. There is a surprisingly present-day emphasis on the egalitarian nature of the process and its strenuous efforts not to put 'square pegs into round holes'. Whilst it patently shows an idealized version of the process, it does demonstrate that great effort and planning had been put into selection procedures by the autumn of 1944 when the film was made. It also indirectly highlights the earlier areas of concern that had necessitated the changes. It should be remarked here how much the background of those selected for commissioning changed from 1942 onwards in comparison to the figures shown above for 1939. By the end of hostilities 'two thirds of all new entrants being accepted ... were men who had been educated outside the public school system. One in five of them had gone

¹⁰⁰ Jack Lawson MP, Army Estimates debate, 11th March 1942. Retrieved from

<www.hansard.parliament.uk>, [December 11th 2022].

¹⁰¹ For a good overview see Allport, pp.11-13 and 99-100.

¹⁰² Refer to Hugh Murray, *The Transformation of Selection Procedures*.

¹⁰³ Murray, *Transformation*.

¹⁰⁴ Adair ibid p.67 and Hugh Murray, *Transformation*, p.65-66.

¹⁰⁵ Personnel Selection in the British Army, IWM UKY591, Imperial War Museum Film Archive.

to no more than an elementary school.'106 Some senior army officers and indeed politicians were uneasy about this. They argued that this produced 'junior officers who were overly familiar with the ORs yet insufficiently considerate of their real needs'.107 These critics felt a lack of experience with 'staff' and 'households' seen in traditional officer backgrounds undermined the leadership provided by these new officers. However, it is well documented that, overall, public perception welcomed these changes, reflected in newspaper coverage.108 Even so, in some units there were tensions between this new type of officer and pre-war regulars and even Territorials.109

Post-selection, officers were trained in OCTUs in wartime; the period of time in these varied throughout the war.¹¹⁰ Formal training for leadership (as opposed to command) was limited and conducted by the regiments rather than centrally.¹¹¹ The Military Training Pamphlet *Fieldcraft, Battle Drill, Section and Platoon Tactics* ¹¹² (March 1944) acknowledges this was still the case, although it makes suggestions regarding what we would now call best practice:

The leader of any group must understand the difference between morale and discipline and aim at both. He must set himself the deliberate task of inspiring his men and adding to their skill the determination which wins battles.¹¹³

An examination of training syllabi from RMA Sandhurst covering the period 1930–40¹¹⁴ shows that whilst frequent reference was made to leadership and the need to inculcate trainee officers with the right attitudes, there was nothing in the way of specific 'leadership' training. This was first introduced

¹⁰⁶ Allport, ibid p.289.

¹⁰⁷ Allport, p.100.

¹⁰⁸ For press coverage see 'The Making of an Army Officer' in *The Sphere*, Saturday 19th June 1943 p.366, and 'Three Day Test Picks Army's Future Officers' in *Dundee Courier*, Friday 26th June 1942, p.3. Both overwhelmingly positive reports on the new WOSB scheme.

¹⁰⁹ Allport, Ibid.

¹¹⁰ Ellis ibid p.192. Both quotes.

¹¹¹ Both points noted by French, Churchill's Army p.58.

¹¹² Fieldcraft, Battle Drill, Section and Platoon Tactics (London: War Office, March 1944).

¹¹³ Ibid. p.38.

¹¹⁴ Course Syllabus 1930, Details of Hours Allotted to Each Subject (1936) and Course Syllabus 1938, RMA Sandhurst Archives

in the 1948 syllabus.¹¹⁵ However, it is important to remember that anecdotal oral history material and some reports from training centres suggest that guidance and advice about leading were often part and parcel of other training such as tactical exercises and route marches and that the 'absence of evidence is not evidence of absence', to use the archaeological axiom. Even so, we can conclude safely that such guidance was ad hoc and lacked any doctrinal or corporate direction from the army. That was the case with the commissioned ranks, but what about the more numerous non-commissioned ranks?

NCOs were also vital in the leadership of units. It is necessary here to clarify how their leadership differed from that of officers beyond simply their position within the rank structure. 'Officers held the King's Commission, which put them under different disciplinary conditions ... and gave them the unique responsibility for exercising command over their subordinates'. 116 As French writes, 'for most private soldiers authority and leadership on a daily basis was personified by ... NCOs'. 117 French's study of the army in the nineteenth and twentieth centuries contains a number of persuasively argued points supported by extensive primary source material. 118 He suggests that 'commissioned officers were leaders; warrant officers and NCOs were supervisors'; 119 he argues that this was a weakness and one with deep historical roots but also one that was gradually addressed during the Second World War and afterwards. French's position is certainly open to criticism, and it seems he rather over-emphasises this point, but it also carries an essence of an important truth when addressing the British Army of the inter- and early-war period. A 2003 paper prepared for the UK Defence Forum sets out the traditional role of the British NCO; it makes a number of salient points: 'In simplistic terms the commissioned officer leads, commands and directs; the NCO organises and administers and the soldier executes. In reality the relationship is far more complex. 120 Also, NCOs

¹¹⁵ Course Syllabus 1948 and training materials, RMAS Archive

¹¹⁶ Allport, ibid p.328.

¹¹⁷ French, *Military Identities* p.170.

¹¹⁸ French, ibid, Chapter 6.

¹¹⁹ French p.288.

¹²⁰ 'The Role of the Non-Commissioned Officer in the British Army' UK Defence Forum paper CP46, (2003), retrieved from <UKDF.org.uk> [17/02/2017] p.4.

'form the middle management, the backbone of the army. They maintain the traditions and standards', 121 but it goes on to note that 'officers possess greater initiative', 122 this being a function of their training and authority and of the nature of those selected. Christine Bielecki has written of NCOs during the war that 'they were the day-to-day template of how a soldier should behave' 123 and that 'a good NCO would steady the nerves of junior officers as well as ORs'. 124 This last point is important; the role of NCOs, particularly senior NCOs, in supporting and guiding junior officers was vital but is often underplayed, although this does not negate the criticisms of French and others.

When Murray Walker arrived at the GREYS as a newly commissioned second lieutenant in September 1944, he was taken to his troop by his squadron commander, Major Bonham. Bonham took him straight to the troop sergeant, Sgt. McPherson, and made it quite clear to Walker that McPherson would be in charge until the sergeant felt Walker was ready to take over. Walker recalled Major Bonham saying:

McPherson has been with us since Palestine. He has forgotten more about fighting and the way the regiment does it than you'll ever know and when he says you're capable of commanding a troop you will have one.¹²⁵

Although taken aback at the time, Walker wrote that he later realised it was the right way to do things. Armoured units appear to have given NCOs more responsibility than was usual in much of the army of the time. Douglas Browne (44 RTR) felt this was the case. 126 It is striking that the guidance for junior leaders issued in 1944 by the Royal Armoured Corps is aimed at both NCOs and

¹²¹ CP46 p.5.

¹²² Ibid.

¹²³ Christine Bielecki, 'British Infantry Morale during the Italian Campaign 1943-45' (unpublished PhD thesis, University College London, 2006), p. 261.

¹²⁴ Bielecki, ibid.

¹²⁵ Walker, p.43.

¹²⁶ Douglas Browne, interview with the researcher.

officers and makes little distinction between them.¹²⁷ The role of British NCOs in leadership was complicated and had many variables but there were clear differences with the German system.

It was undoubtedly true that German NCOs in the inter-war era and during the war were entrusted with greater responsibility by the Wehrmacht. 128 Responsibility here specifically refers to both command authority at a tactical level and what we might now call line management responsibility. German infantry units had a smaller proportion of officers compared to their British equivalents; although less pronounced, the same applied to armoured units. Traditionally, their NCOs had been given more leeway to act in battle¹²⁹ and this was institutionalised by doctrine both shortly before and during the war. The same applied to junior officers; German doctrine and training encouraged initiative, and this has been well documented in post-war studies. 130 Again, the British were forced to address this in the course of the war. It had been identified as a weakness both by the British themselves and by the Germans early in the war, as the next part of the thesis will show. Tracy Craggs, reviewing the evidence from a variety of sources, concludes that 'standards of junior leadership were superior'131 in the German Army. It is important to clarify that this is in general terms. There were German units with poor junior leadership and British ones that had excellent junior leadership. The quality of both varied by time and place but, when considering overall performance, the majority of commentators agree that the Germans had the edge. 132 This difference declined significantly later in the war due to both pressure on the German system and improvements in the British one. 133 The principal focus of that edge was around tactical leadership

¹²⁷ The Royal Armoured Corps: Junior Leadership.

¹²⁸ French, *Churchill's Army* pp.57-8, 80 and Visser, 'Organizational Gestalt, personnel management and performance' Conference Paper, 4th Organization Studies Summer Workshop, Pissouri, Cyprus (2008).

¹²⁹ For a concise and thoroughly researched summary of the origins of this see A. Watson, 'Junior Officership in the German Army during the Great War, 1914–1918' in *War in History* (2007) 14 (4).

¹³⁰ French ibid p.58-9 and Jörg Muth, *Command Culture* (Denton: University of North Texas Press, 2011) pp.97 -102 and 183-85.

¹³¹ Tracey Craggs, An Unspectacular War p. 70.

¹³² Refer to, Jap Jan Brouwer, *The German Way of War* (Barnsley: Pen & Sword, 2021) for a vociferous if flawed argument of this point (throughout) but also, Millett, Murray, *Lessons of War* in *The National Interest*, Winter 1988/9, No. 14, p. 89.

¹³³ Jonathan House, *Toward Combined Arms Warfare* (1984) US Army Staff College, Research Survey No.2 pp.125-28.

in battle. One relevant example comes from I/19 *Panzergrenadiere* within 9. SS *Panzer-Division*, a formation 4th Armoured Brigade encountered in both Normandy and Holland. In Normandy, a *Sturmmann* (equivalent to a lance corporal), originally from *20. Panzergrenadier Regiment*, Hermann Alber, led an ad hoc group of company runners from the regiment in a successful counterattack against British troops for which he was awarded a posthumous Knight's Cross. ¹³⁴ It should be mentioned that Alber was only eighteen years old. Whilst not commonplace, actions like those of Alber were not exceptionally unusual either. Junior NCOs were expected to show initiative and aggression. ¹³⁵

The ability of British NCOs to lead tactically in the absence of officers during this period has been criticised extensively in the post-war period, and not entirely without justification. This is a strongly contested area on which large amounts have been written; this commenced during the war¹³⁶ and has continued since amongst both historians and military professionals.¹³⁷ Specifically, the failings in tactical leadership and command seem to have occurred during offensive operations. Going forward required more initiative, strong leadership and confident troops; it presented, in most cases, far greater danger than holding a position and also greater opportunities for non-participation.¹³⁸ It is also important to consider the nature of many British units in the period under consideration. The majority of soldiers in the British and indeed Canadian armies (similar criticisms have been levelled at both) entered combat operations for the first time in June 1944. Many junior NCOs only had experience of leading on exercises. The majority would have found real combat both more

¹³⁴ Tieke, *In the Firestorm of the Last Years of the War* (Winnipeg: JJ Fedorowicz, 1999) p.151. Also, https://www.tracesofwar.com/persons/28066/Alber-Hermann-Karl-SS-PzGrenReg20.htm. [Retrieved, December 18th 2022].

¹³⁵ Brouwer, pp.150-53.

¹³⁶ Of note are the much-cited reports from Brigadier James Hargest (CAB 106/1060) and Captain Lionel Wigram (WO 231/14). They are quoted at length in D'Este and Hastings, providing much of the grist to their respective mills. Also, Lt. Col. Turner's report on 6DWR which led to their disbandment (WO 205/5G) All TNA, Kew

¹³⁷ Some key works which cover this issue at length: D'Este, *Decision in Normandy*, Chapter 16, Hastings, *Overlord*, Chapter 4, French. *Raising Churchill's Army*, pp. 242-44, 262-64 and Hart, *Colossal Cracks*, pp.25-34

¹³⁸ French *Churchill's Army*, p.139. Also, D. Rowland and L. R. Speight, 'Surveying the Spectrum of Human Behaviour in Front Line Combat' in *Military Operations Research*, Vol. 12, No. 4 (2007), pp. 47-60.

confusing and more frightening than they had imagined.¹³⁹ There were of course experienced and battle-hardened NCOs scattered throughout these newly deployed units and in far more significant numbers in formations such as 4th Armoured Brigade, who had fought in North Africa and Italy. They were not poorly trained or motivated, as the Germans themselves acknowledged.¹⁴⁰ They frequently showed courage and determination, but the doctrinal position of the British Army, certainly until well into 1944, meant that their training and indeed most of their operational experience decreed that they were far less likely to seize fleeting tactical opportunities or to make on-the-spot decisions that would normally require an officer's authority.

Accounts from throughout the war, in all theatres, provide incidents where British and Commonwealth troops conducted steadfast defensive actions against prolonged and fierce attacks when officers were either not present or became casualties early on. For example, 'A' Company 1 KRRC at Sidi Rezegh in November 1941¹⁴¹ and the anti-tank platoon of 1st Tyneside Scottish at Rauray on July 1st, 1944.¹⁴² There are many more. However, in offensive operations in some battalions, the loss of officers certainly did bring about a loss of momentum or even outright retreat, such as that experienced by 5th Wiltshires at Mount Pincon¹⁴³ and Brigadier Hargest's observations about troops of 50th Infantry Division on June 16th; these fell back when they were simply 'out of touch' with officers in dense countryside.¹⁴⁴ Whilst these reports are not necessarily indicative of general performance, there is substantial anecdotal evidence to suggest that such incidents were at least not uncommon.¹⁴⁵ Yet at no point does the available evidence¹⁴⁶ show any individual unit of 4th Armoured Brigade in Italy or North-West Europe in a position where an attack halted because all of

¹³⁹ Allport ibid p.221-25.

¹⁴⁰ French Ibid p.10-11.

¹⁴¹ Wake and Deedes, Swift and Bold (Aldershot: Gale and Polden,1949) p.56-74.

¹⁴²'Repulse by 49 Div of Enemy Attack on Rauray', Appendix A of Intelligence Summary No.22 in WO 171/500, TNA, Kew.

¹⁴³ Robin Neillands, *The Battle of Normandy 1944* p.309.

¹⁴⁴ Cited in Carlo D'Este *Decision in Normandy* p.281.

¹⁴⁵ See Allport, ibid p.237-38 and Tarak Barkawi, Soldiers of Empire, Chapter 4.

¹⁴⁶ As discussed in the introduction, unit and brigade war diaries, contemporary letters and diaries and oral history accounts. These include war diaries and accounts drawn from outside of the brigade where one would expect criticism to be more freely given.

the officers of that unit had been killed or wounded, though there were several occasions when this happened. 147 Indeed, when B Company 2 KRRC lost all their officers to a direct hit on an O group during confused fighting in the orchards and small woods around Tréprel and Pierrepont in Normandy, they continued to function effectively. As their attached armour (44 RTR) noted in their war diary, 'this meant that for the space of approximately 2 hrs, the inf with ... [44 RTR] ... were without officers, but this did not appear to deter them in the slightest'. 148 In fact, during this time B Company beat off two determined counterattacks from German infantry, defending ground they had only just captured as part of a wider offensive operation. At Neuenkirchen in April 1945, Sergeant Teale of 2 KRRC and his carrier group were cut off during a faltering British assault¹⁴⁹ and then attacked by German troops. Teale's soldiers repelled this and then counterattacked out of their position; this had a material effect on the wider battalion's battle. Teale was awarded a Distinguished Conduct Medal subsequently, the citation stating that 'the offensive spirit of this NCO and his determined handling of his section, was on this occasion, largely instrumental in the success of the attack'. 150 An issue this thesis will return to repeatedly is that there was considerable variation across the British Army: a problem could be widespread, yet not encountered at all in some units and formations.

One should not forget that troopers and riflemen who had no formal command responsibilities could and did provide a degree of leadership in certain circumstances. The sections and troops were dynamic groups composed of individuals with differing skills and temperaments. Skills, knowledge or just 'big personalities' could and did produce emergent leadership outside of formal hierarchies.

A.J. Perman's (44 RTR) diary¹⁵¹ describes the influence and leadership of his tank's driver,

¹⁴⁷ For instance, 3 CLY had almost all of their officers wounded on July 10th during JUPITER but continued with their allotted tasks; see WO/171/855, TNA, Kew.

¹⁴⁸ 44 RTR War Diary 1944, August entry, WO/171/873, TNA, Kew.

¹⁴⁹ WO 171/5212, appendix, 'The Battle for Neuenkirchen', British units involved were 2 KRRC, a squadron from 44 RTR and elements of 53 RECCE. The German opposition was drawn from the nearby officer school and described in the report as 'fierce, even fanatical'.

¹⁵⁰ DCM citation, Sgt. Teale, WO 373/56/908, TNA, Kew.

¹⁵¹ Normandy Diary, Papers of A.J. Perman, 16283, IWM.

'Smudger', in Normandy, which sometimes exceeded that of the corporal commanding their tank. This was not an uncommon phenomenon. 152 During JUPITER, Troopers Welch and Kemble of the GREYS were in a tank that was knocked out whilst attacking German positions that were in fairly close proximity. 153 The infantry they were with had taken heavy casualties and were in disarray. Welch and Kemble rescued a badly wounded comrade from their tank, provided effective first aid and placed him in a relatively safe position. This all happened whilst under enemy small arms fire. They then picked up an abandoned Bren gun and began giving supporting fire to the infantry and to cover the escape of other GREYS tank crews whose Shermans had been KO'd. This helped to stabilise the situation in their immediate area. During the action, Trooper Welch was shot through an arm and later concussed by a nearby mortar bomb explosion. When all of their ammunition was expended, they fell back. Trooper Kemble was able to provide a clear and highly useful situation report to the regimental HQ shortly afterwards.¹⁵⁴ Both men received the Military Medal for these actions. Their citations state that they showed 'outstanding courage and initiative although separated from ... officers and NCOs'. 155 Many soldiers involved in such incidents were, of course, subsequently promoted to become NCOs, but some chose to remain as troopers or riflemen or indeed were not seen as suitable for promotion for some reason. Godfrey Welch remained a trooper.

Overwhelmingly, NCOs came from the same class/social background as the riflemen and troopers they led at the lower levels (corporal and lance corporal); they appear to have been seen as not very different by the ordinary soldiers. Interestingly, Knut Pipping's work on the Finnish army conducted in the early 1940s notes exactly the same point. From sergeant upwards there was noticeably a more formal relationship (again, mirrored in Pipping), and although this can be

¹⁵² See Allport, ibid p.115-18.

¹⁵³ Godfrey Welch, Reel 2, 20610 IWM Sound Archive and WO 373/49/231, TNA, Kew.

¹⁵⁴ WO 373/49/230 and WO 373/49/231, TNA, Kew. Although their citations state they both gave sitreps, Welch in his IWM interview is clear that he was in no fit state and went straight to hospital.

¹⁵⁵ WO 373/49/230 and WO 373/49/231, TNA, Kew.

¹⁵⁶ French, *Military Identities* p.288. Also attested in most veteran accounts used for this work.

¹⁵⁷ Knut Pipping, *Infantry Company as Society* (Helsinki: National Defence University, 2008), p.131-33.

overemphasised, it is clear that in the army of the 1940s, discipline and deference to rank remained ingrained. Fred Cooper, a sergeant in 2 KRRC from Normandy onwards, remembered that whilst relations between riflemen and NCOs were generally friendly and quite informal, "if I told someone to do something, they did".158 Earlier in the war, NCOs were a far less homogenous group than the officers, reflecting a much wider social spectrum and differing experiences. In 2 KRRC, Fred Cooper was a shop handyman before the war¹⁵⁹ and Charles Lewer an engineering apprentice.¹⁶⁰ CSM Atkin in C Company had joined the regiment as a young man but had gone on to have a career as a police officer.¹⁶¹ He had re-joined the army on the outbreak of war. His company commander remembered him as 'a marvellous man ... [who] ... got an MM at Alamein'.¹⁶² Notably, he won this leading his platoon in action in the absence of an officer. Ted Wood, a lance corporal in the same company, also remembered Atkin as a popular and very capable NCO.¹⁶³ In 44 RTR, Douglas Browne had been an 'office boy' for a company that built cars and Anthony Bashford a junior clerk at the Petroleum Board. NCOs were thus overwhelmingly from working class or, slightly less so, lower-middle-class backgrounds, reflecting the great majority of wartime ORs.

Selection for junior NCO roles seems to have been largely skills driven. This is unsurprising; many NCO roles involved controlling small teams using a specific piece of equipment. In 4th Armoured Brigade's context perhaps an MMG or mortar in the motor battalion or a single tank in an armoured regiment. The ability to operate the system confidently and understand its tactical options was vital, boosting fighting effectiveness through the already discussed factors of professional competence and follower trust. Ted Wood (2 KRRC) stated that he was made a lance corporal in the mortar platoon because of his excellent mental arithmetic, which helped with calculating ranges and charges.¹⁶⁴ Douglas Browne (44 RTR) had been to grammar school and was earmarked as a

¹⁵⁸ Fred Cooper, interview, 21118, IWM Sound Archive.

¹⁵⁹ Fred Cooper, ibid.

¹⁶⁰ Charles Lewer, interview with the researcher.

¹⁶¹ Charles Atkin Record of Service, Metropolitan Police Service, held at MPS Heritage Centre, London.

¹⁶² Papers of Hereward Wake, 17489, IWM and WO 373/22/403 TNA, Kew.

¹⁶³ Ted Wood, interview with the researcher, 15/09/2012.

¹⁶⁴ Ibid.

potential officer but failed the selection board (he felt he lacked confidence); even so, he was rapidly promoted to lance corporal and then corporal because he could already drive and was a good W/T operator. This was the norm across the army: memoirs and interviews of non-4th Armoured Brigade veterans show similar processes. He However, further progress as an NCO appears to have relied more on experience and leadership qualities, as identified by senior NCOs and platoon and company officers, although soldiers always had to be able to reach minimum levels of education (specifically prescribed by the army) for and pass cadre courses. The cadre courses for NCOs were, unsurprisingly given what has already been shown, almost always organised in-house by regiments and could show considerable variation in their difficulty and breadth of training both between regiments and within them. By contrast, the German Army conducted all of its NCO cadre courses in large training schools at *Wehrkreis* (military district) level in arrangements more similar to the way the British trained commissioned officers. Whatever the circumstances, once NCOs and officers were trained, and sent to their new unit or back to their old one, the real task of leading began. This was where the behaviours, attributes and skills identified during selection or learnt in training would be tested by a number of challenges.

What made leading difficult?

Those leading 4th Armoured Brigade, regardless of rank, faced a range of issues and difficulties which would test their ability as leaders. Some of these were general to the whole army and others had more localised origins not faced in all formations. During the Second World War, the sociocultural structure of the army was given an additional layer of complexity (compared to its inter-war norms) via the inclusion of large numbers of conscripted 'civilians in uniform'. These regarded military service with a wide variety of attitudes, from a patriotic duty to be carried out to the best of

¹⁶⁵ Douglas Browne, interview with the researcher, 24/11/2014.

¹⁶⁶ Charlie Jefferies (HLI), interview with the researcher, 13/06/2014; also noted in several veteran accounts in Tracey Craggs, *An Unspectacular War*.

¹⁶⁷ French, ibid, p.171-72.

¹⁶⁸ For a summary see Samuel Mitcham, *The German Order of Battle* (Mechanicsburg PA: Stackpole Books, 2007).

one's ability through to an unwarranted burden to be escaped at the first opportunity. ¹⁶⁹ In addition, men were frequently allocated to units on what appeared, to them at least, to be an entirely random basis. ¹⁷⁰ The great majority of British soldiers serving in the army from late 1940 onwards were 'for the duration' conscripts. As Alan Allport has written, 'they were not just different from the peacetime regulars. They were also very different from the citizen-soldiers of their fathers' generation. ¹⁷¹ These men generally had little or no military or paramilitary experience, in contrast to their German counterparts. They were inculcated with the 'cultural stripe' of 1930s Britain, which was broadly antimilitarist and sceptical about army life generally and the quality of leadership in particular, a well-documented legacy of the First World War. ¹⁷² Such soldiers were far less disposed to blind obedience and were sometimes happy to question orders, a fact acknowledged in Brigadier A. B. McPherson's monograph, *Discipline* (1950), ¹⁷³ which was the War Office's official history of the subject. These attitudes could be deeply problematic in the conduct of command and to the fighting effectiveness of troops. How this was dealt with was key and approaches differed across the army.

It is important to remember that 'Britain in 1939 was a liberal parliamentary democracy which took seriously the individual rights and welfare of its citizens. This placed constraints upon its military performance ... [shared by the Dominions and USA] ... which did not exist for Germany, Japan or the Soviet Union.'174 Leading an army of this type was a challenging task. Put very simply, British officers and NCOs lacked the coercive tools used so extensively by the Axis powers and the Soviets. This is not to say that there were not coercive tools available to British officers and NCOs; there certainly were, but, crucially, they lacked the draconian nature seen elsewhere. As Hew Strachan has pointed out, a good explanation of the German's phenomenal endurance could be

¹⁶⁹ For an excellent overview of this see Ellis, *The Sharp End*, Chapter 8.

¹⁷⁰ Allport Browned Off and Bloody Minded, Chapters 1 and 4.

¹⁷¹ Allport, p.77.

¹⁷² For a valuable review of this factor see Gary Sheffield, *The Shadow of the Somme* in *Time to Kill* ibid. Also, Anthony Clayton, *The British Officer* (London: Routledge, 2013) p.219-20.

¹⁷³ Brigadier A. B. McPherson, *Discipline* (London: War Office, 1950).

¹⁷⁴ Allport, ibid p.269.

found in the fact that they 'executed at least 15,000 servicemen in the Second World War'. 175 By comparison, the British executed no-one for military offences during that war but generally failed to show the degree of fanaticism exhibited by many German units. Some senior British commanders were convinced that a restoration of the death penalty for the offences of cowardice and desertion would stiffen the resolve of the army and prevent the occasionally serious issues with desertion. 176 French argues that the return of the death penalty was blocked because '[t]he army's treatment of deserters was governed by what was politically expedient and by the need to maximize the utility of scarce manpower'. This issue is important because it sets out the cultural and political background against which the British Army operated and clearly illustrates its fundamental difference from that of the Axis nations. As noted in the introduction, this work strives to place British performance in context with that of the Germans. These differences thus matter because, using the leadership levers model of persuasion/inspiration, coercion and example, we can see that German officers and NCOs had, in principle at least, a stronger set of resources for both coercion and persuasion/inspiration. Intense, all-pervading propaganda¹⁷⁸ combined with a harsh and tightly enforced discipline system produced a highly motivated army in most circumstances. The societies that German, Japanese, and indeed Soviet soldiers were drawn from were more tightly controlled than that of the UK. Whilst Britain certainly had relatively strict censorship during the war, and this fact should never be overlooked, it was not of the same scale or depth as that in the totalitarian states. 179 Likewise, the propaganda efforts directed at either civilians or soldiers were of a far less omnipresent type than those elsewhere. 180

¹⁷⁵Hew Strachan, 'Training, Morale and Modern War' in *Journal of Contemporary History*, Vol. 41, No. 2 (Apr. 2006) p.215.

¹⁷⁶ For a detailed study of this issue see French, 'Discipline and the Death Penalty in the British Army in the War against Germany during the Second World War' in *Journal of Contemporary History*, (1998) Volume 33 (4).

¹⁷⁷ French, 'Discipline', p.544.

¹⁷⁸ Central to the arguments of Omer Bartov in, *The Eastern Front, 1941-1945: German Troops and the Barbarization of Warfare* (London: Palgrave Macmillan, 2001) and Jürgen Förster in, *Motivation and Indoctrination in the Wehrmacht* in *Time to Kill* ibid. Discussed throughout both.

¹⁷⁹ Michael Balfour, *Propaganda in War 1939-1945* (London: Faber, 2010), gives a detailed comparative study of the UK and Germany. First published in 1979, it remains an authoritative survey.

¹⁸⁰ A. Kallis, *Nazi Propaganda and the Second World War* (Basingstoke: Palgrave, 2005).

The fear of brutal, exemplary punishments was undoubtedly a factor in German soldiers' defensive stubbornness and the determination with which attacks were often pressed home; ¹⁸¹ it is not the only factor, as will be shown elsewhere in this thesis, but important nonetheless. This brutal and brutalizing discipline formed a significant element within the leadership provided by German officers, as did the cultural and ideological climate which made their soldiers more accepting of discipline, although, as will be seen later, this did vary between units and branches. The British Army at the time was well aware of this discrepancy in leverage and the difference in leadership culture. ¹⁸² The army of 1940–42 had undergone a surge of intellectual introspection and 'soul-searching' following a series of disasters. ¹⁸³ The important point here is that leadership in British units and formations started from a different place to that of German ones, and that place was one which contained influences with the potential to undermine fighting effectiveness. This thesis will show how leaders within some British units and formations were able to successfully negotiate these difficulties whilst others were not. These general issues had an impact across the entire army, but what about 4th Armoured Brigade specifically?

New officers and NCOs, either those transferred in from other units or new to the army altogether, faced another potential difficulty as leaders: the large veteran cadre within the brigade. Lord Bramall (2 KRRC), a new twenty-year-old second lieutenant, arrived early in 1944; he reflected later that:

They'd been through the battles since Alamein onwards and they'd given their all ... those that were left were tired ... I don't think they were all that enthusiastic about taking more risks than was absolutely necessary. I remember one old sweat coming

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¹⁸¹ Förster, ibid p.272-73 and Stephen Hart, Colossal Cracks p.26.

¹⁸² As evidenced in, among others, Lt. Col. H.V. Dicks, *The Psychological Foundations of the Wehrmacht* (1944) WO 241/1, TNA, Kew.

¹⁸³ See the next chapter for a discussion of this.

up to me and saying: 'Don't worry Sir, you'll be alright, we'll look after you'. But you realised ... it was your job to look after them ... and encourage them. 184

Bramall made a number of comments on this particular issue in the period between the 1980s and the early 2000s. 185 The emphasis and tone were different in some interviews, but it's clear he felt that the 'old sweats' could be problematic. Charles Lewer, 186 also 2 KRRC, arrived at about the same time as a corporal, having served in the UK with another motor battalion (8 KRRC) for nearly two years, and Tony Rampling¹⁸⁷ joined 44 RTR as a trooper when it was in Belgium, transferring from the Reconnaissance Corps. Both men remarked that the soldiers were experienced and formed a tight-knit group; characterised by the use of pseudo-Arabic slang and the retention of 'desert habits', they were "hardened blokes". 188 Stephen King, also 44 RTR, was transferred into the unit from another armoured division late in 1944; he felt that the troopers and NCOs were "a bunch of rascals" but "good soldiers". 189 They formed, as noted earlier, a part of the only significant grouping of the army with extensive combat experience. There was thus a strong knowledge and skill base from which emergent leaders could spring. Experienced troops, particularly those who had seen extensive service, were sometimes seen as 'worn-out' or 'canny', as Lord Bramall observed above. The opinion that they were more risk-averse was widespread. 190 Whilst there was some truth in this, the reality was more complex. These soldiers also had, for the most part, considerable tactical skill and mental and physical robustness; Stuart Mitchell's concept of 'battle wisdom' provides a better way of viewing such men. 191 This idea will be examined in more detail in a later chapter. The characteristics observed by newcomers also demonstrate that the brigade had a

¹⁸⁴ Quoted in Andrew Williams *D-Day to Berlin* (London: Hodder & Staughton, 2004) p.109-10.

¹⁸⁵ For instance, also used in *Speech to Platoon Commanders* (1984) given at Warminster when CDS. Papers of FM Lord Bramall, University of Buckingham.

¹⁸⁶ Charles Lewer, interview by the researcher, 25/06/2012.

¹⁸⁷ Tony Rampling, interview by the researcher, 16/07/2014.

¹⁸⁸ Rampling, ibid.

¹⁸⁹ Stephen King, Veteran's Panel at *Highway to the Reich: Operation Market Garden and the Battle for the Low Countries 1944: Seventy Years On*, September 2014, University of Wolverhampton. Researcher's notes from panel and conversation afterwards.

¹⁹⁰ Allport, ibid p.237.

¹⁹¹ Stuart Mitchell, 'An Inter-Disciplinary Study of Learning in the 32nd Division on the Western Front, 1916-1918'. The concept, drawn from US studies undertaken in the 1940s, encompasses tactical skill and 'best practice' but also includes elements of self-preservation and 'implementation without authorisation'. It is thus neither wholly negative nor positive from an organisational viewpoint.

well-developed and strongly felt loyalty/identity structure which manifested itself in speech and customs. Visible, outward indicators of common experience and allegiance are a well-established sign of groups' shared identity. 192 New officers and NCOs could struggle to maintain discipline and to create the necessary confidence in their abilities.

Officers leading at platoon or company level in combat arms were subject to the most intense scrutiny, which Lord Bramall would later refer to as '30 pairs of eyes boring into the back of the platoon commander's neck'. 193 This was because their role put them in harm's way on a regular basis (unambiguously reflected in casualty figures)¹⁹⁴ and their actions produced immediately visible results for which their direct responsibility was clear for their subordinates and peers to see. In a formation such as 4th Armoured Brigade they were also the most numerous commissioned officers. An obituary of a KRRC officer killed in Normandy whilst attached to a battalion of the Middlesex Regiment quotes a sergeant from that unit: '[He] was cool and calm right the way through, always what an officer should be, a gentleman and fearless." This seems to encapsulate much of what was required, though this would always need to be combined with professional competence. Calmness under pressure and physical courage were expected. The balance between access and distance and walking the fine line dividing formal and informal discipline and authority was another important skill, helping to build the essential trust and respect. A.J. Perman of 44 RTR refers to an incident in Normandy in his diary. 196 He and others complained regarding an NCO in their troop to their officer Lt. Cohen. Cohen then used an informal process to resolve the matter when they all believed he should have used a formal one; this, Perman states, undermined confidence in Cohen. This was dealt a further blow by his poor map reading later in the campaign. Obviously, this was a

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¹⁹² Charles Kirke, *Red Coat, Green Machine: Continuity in Change in the British Army 1700-2000* p.96-97 on the military context and more generally, John Tomaney, *Region and place II: Belonging* in *Progress in Human Geography* 39.4 (2015): 507-516.

¹⁹³ Bramall, speech as CDS (1984) Warminster. Speech text, Papers of FM Lord Bramall, University of Buckingham.

¹⁹⁴ For a detailed discussion focussing on Italy, refer to Christine Bielecki, 'British Infantry Morale during the Italian Campaign, 1943-1945'.

¹⁹⁵ KRRC Chronicle 1944, (Winchester: Gale and Polden, 1945) p.134. Obituary of Lt. Harry Dixon.

¹⁹⁶ Normandy Diary, Papers of A.J. Perman, 16283, IWM.

single person's opinion but one that was written down contemporaneously and which resonates with the concerns of ORs throughout the army of the time.¹⁹⁷ The leadership shown appears to be an example of incompetent leadership as discussed earlier, displaying a lack of both judgement and relevant skills.

This complex balancing act between the use of formal and informal systems was a vital part of achieving the trust and respect leaders needed. Charles Kirke discusses formal and informal access and the ability to pass things up or down, bypassing parts of the chain of command. This was an important and necessary process. A different example from 2 KRRC is that of Colour Sergeant Green in C Company, who was a disciplinarian and seemingly obsessed with 'turn out' and minor rules. He was disparaging of the new 'for the duration' soldiers and they in turn didn't like him, not an uncommon scenario across the army at this time (1943). In Tunisia, a rifleman tipped his dinner over Green following a berating for a minor infringement whilst eating, but at the subsequent hearing, all the OR witnesses claimed it had been an accident and the rifleman escaped with a minor punishment, almost certainly with the tacit collusion of the company commander.

That company commander was Major Roland Gibbs, a popular officer²⁰¹ who remained as OC for most of the war and later went on to be one of the brigade's subsequent three chiefs of the general staff. The story provides a good illustration of Kirke's model of 'legitimate secondary adjustments',²⁰² that is, rule bending or breaking which is covertly condoned or at least accepted by those in command. This can, in turn, help support the loyalty/identity structure. In this case, the OC understood that C/Sgt Green's behaviour was not good for morale but could not openly say this; he

¹⁹⁷ Allport p.238-42.

¹⁹⁸ Kirke, *Red Coat, Green Machine*, throughout, but particularly Chapter 4.

¹⁹⁹ For a discussion of this see Allport p.93-5.

²⁰⁰ Ted Wood, interview with the researcher, 10/06/2012.

Noted in his obituary in *The Times*, 11th April 2004, retrieved from <www.thetimes.co.uk>, [December 11th 2022]. This mentions his 'great personal charm' and how he 'won the confidence of everyone about him'. Remarked upon by both Fred Cooper and Ted Wood in interviews.

²⁰² Kirke, ibid p.74-6.

instead allowed a 'secondary adjustment' to occur that would send a message without disrupting the status quo. Kirke suggests this is often more common in units that have good cohesion brought about by the experience of working together and having trust in leaders. Pipping's work likewise emphasises the trust and mutual loyalty that officers, NCOs and men could build up over time provided everyone kept to both formal and informal rules.²⁰³

These day-to-day management issues were an important element in the leadership provided by officers at platoon and company level and were vital for the maintenance of both discipline and morale. However, the professional competence mentioned earlier was always the most vital element, and this was principally focussed on tactical skill and command leadership. This property comprised a mixture of both behaviours and skills. In terms of behaviours, chiefly officers were expected not to 'flap'²⁰⁴ (this was an expectation from above and below) but also to demonstrate physical courage and rational decision making and to show an appropriate degree of concern for their subordinates where necessary. In terms of skills, they were expected to be able to read maps proficiently, to deliver clear, structured briefings and orders and to direct troops in combat with good sense, clarity and tactical expertise. Above all, officers should set examples; failings 'in view' had to be dealt with. Carver sacked the CO of 3 CLY (Lt. Col Sandy Cameron) after he had apparently shown fear bordering on panic during a German bombardment of his regiment's position in July 1944.²⁰⁵ Carver would have been well aware that such visible failures of self-restraint breached the expectations of the ORs regarding officers and thus undermined morale. An effective leader could not be seen to tolerate those kinds of failings. Despite Cameron's previous good, indeed exceptional, 206 record, including numerous decorations, Carver had him removed at once.

²⁰³ Pipping, p.252-55.

²⁰⁴ As referenced in training guidance; *The Royal Armoured Corps: Junior Leadership* 'Whatever you may do, DON'T FLAP.' (emphasis in original) p.29. Tank Museum Archive, Bovington.

²⁰⁵ Carver, *Out of Step* p.195. This was controversial and no contemporary accounts describe this. However, Carver states that Cameron admitted this was true and that he was at breaking point in a later exchange of letters.

²⁰⁶ Cameron had won a Military Cross and bar and a DSO and bar in North Africa and Italy and was 'the most highly decorated officer to serve in the Sharpshooters'. <www.ksymuseum.org.uk/stories> [retrieved January 20th 2023].

Brigade commanders had considerable power over who commanded units within their formation and also how these units were run. The impact of both Currie and Carver will be considered in more detail in the next chapter. However, the structure of the army and the role of the regimental system were also important factors influencing how leadership was viewed and exercised. How these elements fitted together will also be explored in the next chapter. Leadership lacked little in the way of centralised guidance or training across the army, although this changed a little towards the end of the war. In large parts, leadership remained a craft skill, learnt through observation and imitation and heavily dependent on the presence of good role models.

This chapter has shown that it is relatively difficult to disentangle the individual attributes and skills that underpin effective leadership in the military setting. Analysis has considered material more generally related to the areas of morale and tactical skill repeatedly. How to separate these strands, indeed even if it should be attempted, is an essential question which will be returned to later in this work. As discussed, complexity is an inherent feature of large organisations, and the friction of combat intensifies this, adding new layers of unpredictability and unforeseen consequences.

Negotiating with followers, peers and superiors was important and was supported by the ability to utilise both formal and informal mechanisms to achieve the desired results. Effective leadership, in any rank, required the deployment of a range of 'soft', or cognitive, skills and 'hard', or physical, skills. When effectively combined, these enhanced fighting effectiveness by boosting morale and cohesion, creating confidence, and upholding the will to fight and discipline.

Chapter 2. Individuals and Regiments

This chapter examines the role of two elements that had a significant effect on the way that leadership was exercised within 4th Armoured Brigade. These are the influence of key individuals and the attitudes and ethoses produced by differing arms of service and cap badges, which affected the way units were run. As the last chapter indicated, the regimental system was culturally and organisationally highly influential. It influenced the way leadership was exercised within units and the ethos within them. However, the personalities of leaders, particularly those in positions of greater authority, could produce an additional layer of influence on top of the culture of the organisation. This can be termed climate. Climate is 'inherently less stable that culture' and 'it can change relatively quickly as it is highly dependent on the context and the people involved'. The next section will examine the climates created by the two brigadiers.

¹ Army Leadership Doctrine AC72029, p.G,1.

Currie and Carver: A case study of leaders

Brigadier John Currie

1898 – 1944 Royal Artillery Seen here in Italy (1943)



Brigadier Michael Carver

1915 – 2001 Royal Tank Regiment Seen here shortly after his promotion, making him the British Army's youngest brigadier



Illustration 1. John Currie and Michael Carver.

Brigade commanders, especially those in independent brigades, had considerable latitude over how their formations were run, both in terms of day-to-day management and in terms of the selection of officers.² In hierarchical organisations, particularly of this size, where the person in charge is visible and can have a degree of direct contact with most of their subordinates, there is an enormous influence from those at the top. Tarak Barkawi has argued that 'officers, and in particular, commanders, play a crucial role as personified symbols of the collective',³ and this expresses something significant. They will have a pronounced influence on the climate in most cases. Peter Wood, examining a single New Zealand unit, argues that 'the CO is without doubt pivotal to the effective performance of an infantry battalion in combat' and that this rests on personality and experience.⁴ This applies in the current context as well. Personality and experience undoubtedly influence the leadership style used by commanders and also their attitudes to the socio-cultural

² Andrew Holborn makes this point in reference to 56th Independent Infantry Brigade in, *The 56th Infantry Brigade and D-Day* pp. 36-37,216.

³ Barkawi, Soldiers of Empire, p.181.

⁴ Peter Wood, 'A Battle to Win' p. 377.

issues that affect their role. Specifically, why did Currie and Carver lead as they did? Both were from seemingly typical officer backgrounds. What, if anything, distinguished them from their peers? How did this translate into practical actions and how effective were these in enhancing or maintaining the fighting effectiveness of the brigade? Both brigadiers within 4th Armoured Brigade⁵ for the period under examination were pre-war regular soldiers. John Currie (born 1898) commanded the brigade from February 1943 until his death in action in Normandy. He entered the army during the First World War (February 1915) as an artillery subaltern. The substantially younger Michael Carver (born 1915) joined the army in 1933, entering Sandhurst as an officer candidate in the Royal Armoured Corps. Both men came from upper-middle-class backgrounds and had been educated at public schools. In this respect, they were entirely typical of army officers in the interwar period.⁷ Currie was the son of a brigadier general, Carver of a partner in a large, successful textile importing business. Currie had been to Cheltenham College, Carver to Winchester. Whilst these two backgrounds were not at all unusual, and indeed were similar in terms of class and schooling, it is important to remember that within the finely calibrated social microcosm of British officers in the early twentieth century they were from very different worlds. Carver's family were in business and relatively 'new money'.8 His autobiography dwells on his parents' desire to socially climb and achieve a certain type of lifestyle and his own sense of otherness which was greatly increased by the company's financial difficulties from 1929 onwards.

In attempting to explore the two brigadiers' performance and their impact on the brigade's climate, it is vital to consider their views on some of the broader issues around military life and leadership, and to try to shed some light on their personalities. There is a large body of well-evidenced research around the importance of personality in the type and effectiveness of leadership shown by

⁵ There was a brief period under a 'caretaker' brigadier, Hugh Cracroft, in January–March 1944 before Currie returned

⁶ The Half-Yearly Army List 1940 (London: HMSO, 1940).

⁷ French, *Military Identities* p.50.

⁸ Although founded early in the nineteenth century, the company only achieved major success in the 1860s. Carver, *Out of Step*, Chapter 1.

individuals. Carver is of particular interest here because, first, he set out his position on a number of political and social issues very clearly throughout his life and did much of this writing during and immediately after the war, and second, as already mentioned, his background was not as typical as it might at first seem. The Carver family business was severely affected by the economic depression which began in 1929 and this rapidly altered the family's financial position and thus, more slowly, their social one. As a result, he was unable to go to university and also felt an increasing degree of alienation from many of his peers. As a bookish and somewhat introverted child with a stutter, he was already something of an outsider and admitted he was bullied at both of the schools he attended. Even later, Lord Bramall thought he was "always a loner and outsider". He was, however, seen as bright and talented and was one of the fairly small cohort expected to go to university. His inability to get to university through no fault of his own meant that he 'thereafter always seemed to be striving to prove that academically he was equal to the best of university graduates'. 12

Carver acquired a reputation as an intellectual; Lord Bramall recalled he was "very cerebral". All of the UK broadsheet obituaries following his death dwelt on this theme. What constituted intellectualism in the British Army of the thirties and forties and how prevalent this was is a large, complex subject worthy of study in its own right; however, it is worth setting out a few central facts here as the issue has some relevance. The degree of formal education given to army officers during their training had increased significantly during the inter-war period, largely but not entirely due to the increasingly technical and technological nature of warfare. However, the percentage of the

⁹ Adair, ibid p.6-7 and Spangler, House and Palrecha, *Personality and Leadership* in *Personality and Organizations* Schneider and Smith (eds) (London: Psychology Press, 2004).

¹⁰ Carver, *Out of Step*, pp. 6-7,10,17.

¹¹ Lord Bramall, interview 11/05/2012, recorded by the researcher.

¹² Lord Carver obituary. *Daily Telegraph* 11th December 2001, retrieved from <www.telegraph.co.uk.> [November 2017].

¹³ Lord Bramall, interview 11/05/2012, recorded by the researcher.

¹⁴ Daily Telegraph 11th December 2001 (ibid) and The Guardian 12th December 2001, retrieved from www.theguardian.com, [November 2017].

¹⁵ French, *Churchill's Army* p.58-63.

population attending university in this period was small¹⁶ and the army attracted only a limited number from this pool. Some commentators¹⁷ have identified a strong thread of anti-intellectualism in the leadership of the army in the early twentieth century. Whilst not unfounded, the reality seems more nuanced, and by the 1930s there was a definite trend of engagement with new theories and ideas and a more intellectualised approach to them.¹⁸ The much-discussed works of J.F.C. Fuller and B.H. Liddell Hart were relatively popular generally (both men wrote articles for mass circulation newspapers) and were certainly widely read in military circles.¹⁹ Carver seems to emerge from this movement. He undoubtedly had a talent for staff work (staff roles preceded and followed his command of the brigade) and report writing. He was also happy to engage with theoretical debates about issues such as morale.²⁰ Carver's approach is well illustrated in his comment in a training memo to the brigade in July 1944: 'if we all start thinking hard and pool our ideas, we shall outwit the enemy'.²¹ In practical terms, as will be seen in more detail later in this work, Carver was in favour of new approaches and was happy to obtain these from superiors, peers, subordinates or indeed the enemy.

Currie was certainly not of the same type. Whilst the choice of what went into war diaries was not always the formation or unit commander's, they had considerable leeway and some took the initiative to add reports they felt were important for a variety of reasons: self-justification, organisational learning or simply for the historical record. It is obvious that the volume of reports and memos written by Carver and appended to the brigade war diaries of 1944–45 far exceeds those

¹⁶ In both 1930 and 1938 just over 9,000 persons graduated in the UK. House of Commons Research Paper SN/SG/4252. Downloaded from researchbriefings.files.parliament.uk in 2017.

¹⁷ See Sheffield, *Doctrine and Command in the British Army: An Historical Overview* in *Army Doctrine Publication: Operations* (Shrivenham: Development, Concepts and Doctrine Centre, 2010), Eliza Riedi, 'Brains or Polo?' *SFAHR Journal* (Autumn 2006), Vol. 84, No. 339 and David Edgerton, 'C.P. Snow as Anti-Historian of British Science' (2005) Hist. Sci., xliii.

¹⁸ Edgerton ibid.

¹⁹ Carver claims they were more widely talked about than read but still confirms their influence. Interview (1977) 877, IWM Sound Archive.

²⁰ See '4th Armoured Brigade Morale Plan' (June 1946) Papers of Lord Carver (IWM) Box1, File 4, a persuasively argued document, much of which seems surprisingly contemporary.

²¹ '4th Armoured Brigade Training Memorandum', July 1944, 4th Armoured Brigade papers, Tank Museum, Bovington.

from the hand of Currie in 1943–44, but this does not mean Currie was not innovative; he most certainly was. Currie had a reputation for being a strict disciplinarian, and apparently his inspections were feared despite being carried out at break-neck speed.²² There is a revealing sequential set of photos showing Currie inspecting 3 CLY in Sicily.²³ Currie can be seen almost leaving the rest of the inspecting party behind as he strides down the ranks. His own appearance is immaculate and some of the ORs visible look decidedly nervous.

Both Currie and Carver had a reputation for physical bravery and 'leading from the front', and there are numerous examples illustrating that within this thesis. Whilst this quality had its drawbacks and was not universally appreciated, there is strong anecdotal evidence that suggests officers who exhibited this garnered considerable respect from subordinates and peers.²⁴ Their popularity with their subordinates (of all ranks) is hard to gauge, and as we will see below, there is evidence of popularity and unpopularity for both men.²⁵ An effective method for measuring this does not seem possible with the available sources. Whilst popularity is not a sign of good leadership, it is a factor within the 'toolkit' that enables this; not essential, but useful nonetheless. Popularity will certainly strengthen the lever of persuasion/inspiration. As to their reputation with superiors, this seems clearer. Both men were unmistakeably seen as effective officers and good leaders. 4th Armoured Brigade acquired its reputation for reliability under Currie in the latter part of the North Africa campaign and obviously reinforced this in Italy, with Currie winning a second bar to his DSO for his leadership of the brigade during the Sangro fighting.²⁶ Montgomery selected units he felt he could rely on from Eighth Army to bolster the planned invasion of France with a largely untested army, and this further supports the idea that the brigade had an established reputation. Carver was able to

²² Recalled by both Douglas Browne and Ted Wood (interviews with the researcher).

²³ Copies of these are to be found in the 3 CLY archive (Sharpshooters Museum) and National Army Museum photo archive.

²⁴ Allport, ibid p.239-41.

²⁵ Robin Dunn, in *Sword and Wig*, claims that Carver was very popular with the ORs and junior officers but largely unpopular with the more senior ranks within the brigade because of his methods and manner. This seems distinctly plausible. Referring to Carver's peers, Lord Bramall said "his contemporaries didn't like him at all". Interview with the researcher, 11/05/2012.

²⁶ WO/373/4 TNA, Kew.

continue and expand on this. Whilst Currie and Carver were obviously very different personalities, one can also see that they had a number of shared concerns. Both men were firmly wedded to maintaining 'grip' (a concept examined in more detail shortly) and leading from positions where they had a full picture. The speed of decision cycles was undoubtedly enhanced by the practice. Currie's control of the Sangro operation was exercised from a tank kept as far forward as practicable; he endorsed this policy and reiterated the need to keep contact at all times in the post-action report appended to the brigade war diary.²⁷ Carver likewise remained both as mobile and as far forward as practicable during his tenure. He narrowly avoided serious injury when his scout car hit a mine²⁸ and was almost captured when separated from the brigade whilst he was far forward in April 1945.²⁹ Both men were also stern judges of their immediate subordinates and were not afraid to sack those who didn't perform. It is not surprising that these concerns were also shared by Montgomery, and both brigadiers had a good relationship with him, a fact highlighted by some comparatively recent research.

Montgomery's relationship with his lower subordinates, his brigade and division commanders, was scrutinised by Charles Forrester in his 2010 Leeds University PhD thesis.³⁰ The area had received little attention previously, and indeed little more subsequently. It is plainly of much importance to a study such as this one because, as Forrester argues, 'We now know that there had been a significant amount of more informal communication between Montgomery and subordinate commanders than previously identified.'³¹ This can be seen in 4th Armoured Brigade's case in a number of sources used for this study.³² Forrester's work highlights the nature of interaction at the higher levels within 21st Army Group and, on the basis of largely separate evidence to this work, Forrester also notes the importance of informal 'peer group' discussion and the influence of familial,

²⁷ WO 169/8861, '4th Armoured Brigade in Italy', TNA, Kew.

²⁸ Carver, Out of Step p. 206, Holland, November 1944.

²⁹ Ibid p. 214. On Dutch-German border.

³⁰ Forrester, 'Montgomery and his Legions'.

³¹ Forrester, ibid p. 203

³² For example, WO 171/1327, the war diary of 2 KRRC (1944) May 25th and Carver, *Out of Step*, p. 204.

school and 'cap badge' links reinforcing the significance of these factors already documented here. These sorts of networks could certainly help to promote (in both senses of the word) talent but they could also sometimes be an aid to shielding the less competent or deflecting attention from them, as McCarty argues.³³ Montgomery clashed with what he perceived to be cliques within the army but also undoubtedly had his own circle, although his was chiefly based on outlook and competence.³⁴

One of Montgomery's often noted obsessions was with 'grip'. The word was in common usage in the army of the period and the concept it embodies is important in the current context. Grip might be regarded as a synonym of 'control' or 'domination' in the specific realm of military command. It implied that a commander was in control of both the situation generally and of his subordinate's activities specifically. It also implied self-control. Sydney Jary summarised it sharply as 'grip on oneself, grip on one's soldiers and grip on the situation'. ³⁵ Where there was 'grip' there was professionalism and competence. Officers who demonstrated grip could be trusted by superiors, and as shown, trust was a vital commodity, perhaps the vital commodity. Both Currie and Carver frequently use the term in their reports and were seen to exhibit it by superiors. ³⁶ It is important to understand that the degree of control over subordinates implied by grip varied with both the individual officer and the point in time. Some officers, particularly later in the war, were happy to allow subordinates to use greater initiative so long as their intent was met in what would now be termed mission command, a concept more associated with the German army in this era as *Auftragstaktik*. ³⁷ Carver clearly fell into this latter group, at least from the autumn of 1944 onwards, as this thesis will show later with numerous examples.

³³ McCarty, *Point of Failure* pp. 56-60,154-55, 276-77, 362-63.

³⁴ Montgomery, *Memoirs*, loc. 3736-3783 (Kindle edition.).

³⁵ Sydney Jary, 18 Platoon p.7.

³⁶ As stated in Currie's DSO citation for the Sangro, WO 373/4/487; see also Forrester p.160-62.

³⁷ French, *Churchill's Army* pp.20-1 and G. Sloan 'Military Doctrine, Command Philosophy and the Generation of Fighting Power: Genesis and Theory' in *International Affairs*, (2012) 88 (2), p.4-10.

Of course, officers did not 'fall into' these more senior positions such as brigade commanders. There were elements of selection from corps and the army that were exercised by GOCs and their staff, and these were of both a formal and an informal nature. Officers needed to have relevant experience and to have shown professional competence, but they also clearly needed to have patrons or advocates among the corps and army commanders. It is not unreasonable to ask how Currie, a long-serving gunner, came to command an armoured brigade. 38 As Phil McCarty notes, 'by 1944 [in 21st Army Group] fighting commands in all but one case were "to arm appropriate", i.e. infantry officers commanded infantry brigades; 39 and this exception was John Currie. Currie had been the CO of 4 RHA in 1941 and 1942⁴⁰ when they served as part of 7th Armoured Division. As a senior artillery officer, he had a vital role to play in the planning of operations. He helped to substantially reconfigure the way the artillery within 7th Armoured Division was both organised and deployed, showing innovative flair and a firm grasp of the mobility that was required.⁴¹ From here he was appointed to command 9th Armoured Brigade. Currie appears to have distinguished himself while commanding 9th Armoured during the very challenging and high casualty break-in phase of Operation SUPERCHARGE in November 1942. 42 The brigade was almost destroyed but it achieved its objectives. Currie received a bar to his DSO as a result, and Montgomery, writing in a later memoir, credited the brigade's performance as pivotal to the success of SUPERCHARGE.⁴³ Michael Carver had been commanding 1 RTR in 7th Armoured Division, having been on the division's staff before this, immediately prior to his promotion to be the British Army's youngest brigadier. One of his NCOs in 1 RTR reflected later on Carver's leaving the regiment: 'there was

³⁸ Of the ten brigadiers who commanded 4th Armoured Brigade between its creation and the end of the war, Currie was the only gunner; the rest were RTR or cavalry. *History of the 4th Armoured Brigade*, (Glückstadt, Germany: Privately published, 1946) Tank Museum, Bovington.

³⁹ McCarty, *Point of Failure*, p.321.

⁴⁰ Taking over from the influential Lt. Col. Jock Campbell. WO 169/1429, 4 RHA War Diary 1941, September. TNA, Kew.

⁴¹ See WO 169/1429 and WO 373/18/174 (DSO citation) TNA, Kew. Also, Robin Neillands, *The Desert Rats* p.93.

⁴² War Diary of HQ 9th Armoured Brigade WO/169/4233 TNA, Kew.

⁴³ https://collection.nam.ac.uk/detail.php?acc=1975-03-63-15-115> National Army Museum, Brigadier John Currie. [Retrieved January 15th 2023].

considerable emotion on both sides ... he was desperately proud of his regiment ... there was a great store of admiration and infinite trust in return'.⁴⁴

Whilst the brigadiers evidently tolerated, and accepted or expected as a norm, the differences in leadership style of the unit commanders within the brigade, this was not without parameters. Those identified as incompetent were undoubtedly a problem to be dealt with swiftly, 45 but sometimes a competent officer was deemed not suitable to command a battalion or regiment for other, more complicated, reasons. A clear case in point here is Carver's removal of Lieutenant Colonel Bill Heathcoat-Amory as CO of 2 KRRC in July 1944. Heathcoat-Amory had commanded the battalion since August 1942 and was a popular CO.⁴⁶ He was 43 years old in the summer of 1944.⁴⁷Brigadier Carver, the new commander, was not impressed with Heathcoat-Amory's grip on the battalion. In his later memoirs⁴⁸ he stated that his first visit to the battalion 'left me uneasy' and that there was a 'general air of slackness.' Carver concedes that Heathcoat-Amory was 'highly respected' but he felt he had to go. The memoir is vague as to the actual problems that existed in the battalion and no specific issues are recorded in the war diaries of either 2 KRRC or the brigade, or in the corps-level records, so one is left with the suspicion that this was either more of a clash of personalities or about something else. As will shortly be shown, this may have been linked to Carver's other prejudices, or, as the next chapter will show, wider issues of organisational culture within 2 KRRC. Lord Bramall was close to the events and states, "Bill Heathcoat-Amory was a very nice chap ... a very brave chap, but he saw it in a different way to the Brigadier ... I think he [Carver] thought he was too old and was tired. He wanted fresh blood."49

⁴⁴ Peter Roach, *The 8:15 to War* (London: Leo Cooper, 1982) p.140.

⁴⁵ This was undoubtedly the case across 21st Army Group in 1944 and 1945; there was a host of sackings of battalion, brigade and division commanders who were seen as either poor leaders or lacking in drive. This is discussed at length throughout both Hastings, *Overlord*, and Forrester, 'Montgomery and his Legions'. Also, see French *Churchill's Army* p.253.

⁴⁶ Noted by Carver, ibid p.192 and attested in interviews by Ted Wood and Fred Cooper.

⁴⁷ William Heathcoat-Amory's biography retrieved from <thepeerage.com> person page 4602, [retrieved December 2012].

⁴⁸ Carver, ibid pp.192-3.

⁴⁹ Interview of Lord Bramall by the researcher.

It is important to note that Carver acknowledged in *Out of Step* that he sought advice informally about sacking Heathcoat-Amory from a group of senior officers he had known in North Africa, many of whom were now to be found in staff positions in corps and army headquarters. These kinds of informal peer group networks could be highly influential, and not always in a positive way, but also, under the right circumstances, very effective in giving advice and support. This group included Major General George 'Bobbie' Erskine (commanding 7th Armoured Division but originally a KRRC officer), Major General George 'Pip' Roberts (commanding 11th Armoured Division) and Brigadier Harold 'Pete' Pyman (on the staff of 30 Corps). All of these had been officers in 7th Armoured Division in North Africa. Significantly, one can see that a brigadier's ideas about leadership, morale and what professional competence 'looked like' were highly influential but also that these would often be moderated by the opinion of peers and senior mentors.

Brigadiers were largely responsible for the sacking and appointment of battalion/regiment commanding officers. They in turn had a good degree of leeway over the selection or removal of company/squadron commanders within their units. One can see that these groups could very rapidly become self-replicating, generating a group norm. This could have a pronounced effect, either positive or negative, on group cohesion, morale and the formation's abilities. As Ben Kite has argued:

Commanding Officers of battalions and regiments ... played a disproportionately large role ... in creating [the right] ethos ... arguably the company and squadron officers ... were most critical in leadership terms. It was they who would often personally underpin the soldier's morale, helping them to withstand the shocks and danger of battle and leading them in accomplishing their battlefield tasks.⁵⁰

⁵⁰ Kite, ibid p.260.

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Kite highlights some important factors here regarding leadership at the 'sharp end'. Commanding officers in charge of battalions or regiments set the tone and standards but it was officers and NCOs leading at company and platoon level who 'transmitted' leadership to the majority of soldiers. A unit capable of 'withstanding the shocks and danger of battle' as a cohesive, functioning body, one of the key elements used to define fighting effectiveness in this thesis, needed both of these types of leadership. The tone and standards set from the top were important, and it is necessary to understand how commanders set about producing the desired effects.

Carver seems to have sought to select leaders in his own image to a considerable extent. He replaced three relatively senior officers in his first month in command of the brigade: Heathcoat-Amory, commanding 2 KRRC, Cameron, commanding 3 CLY and the brigade major, Major Pat Robertson. He was also unsuccessful in removing a fourth.⁵¹ All of these officers were substantially older than Carver and were replaced by younger men. Specifically, he favoured younger and more intellectual officers. He described one divisional commander as 'elderly, 49 years old'.⁵² He would write shortly after the war that 'a leader must look forward; a nostalgia for the good old days gets one nowhere'.⁵³ Carver appears to have been part of the trend amongst officers serving in 'teeth' arms at this time who believed that modern warfare had increased so much in its pace, complexity and intensity that only young men could withstand its physical and intellectual rigours.⁵⁴ The army clearly recognised there was at least some truth in this. In 1941 the 'Army Council decided that no officer over the age of forty-five would be appointed to command a field force unit ... [and] ... no officer was to be allowed to remain in the command of a field force unit after he reached the age of fifty, unless he had very special qualifications'.⁵⁵

⁵¹ Len Livingston-Learmouth of 4 RHA; see Carver, *Out of Step*, p.208 and Robin Dunn, *Sword and Wig*, p.81. They subsequently developed a good working relationship.

⁵² Carver, p.215.

^{53 &#}x27;Leadership' draft article, 1949. Papers of Lord Carver (IWM) Box 2.

⁵⁴ See comments throughout Carver, *Out of Step*, but also an idea that emerged strongly in the inter-war era linking youth, technology and dynamism. See E. Wright, Education, 'Sport and Militarism' (unpublished PhD thesis, University of Leicester,1980) and Anthony Bousquet, 'The Scientific Way of Warfare' (unpublished PhD thesis, LSE, 2007).

⁵⁵ French, Churchill's Army p.79.

Carver was undoubtedly forward looking himself⁵⁶ and found strongly conservative and traditional officers difficult to work with, particularly those with long service in the peacetime army. He was vocal in his criticism, both during and immediately after the war, of those who he felt saw a commission as a kind of sinecure.⁵⁷ However, we should not forget that many of these older officers had extensive frontline service in the First World War and/or in often challenging, although smallscale, colonial conflicts. This was something Carver seemed to largely discount even though, unquestionably, some of that experience would have been relevant and useful. Montgomery and John Currie provide examples of this group who were clearly highly capable and not exactly lacking in drive and energy either. One incident gives an illustration of Carver's worldview and the climate he created. In the weeks after the end of the war, Carver intervened to prevent Lieutenant Murray Walker from being reduced to the ranks after an acrimonious falling out with the CO of the GREYS.⁵⁸ Walker was not a 'typical' GREYS officer; his modest background, love of technical 'shop' and the fact that he had started a motorcycle racing club within the brigade all drew the ire of Lt. Col. Stewart. When he also complained about being passed over for promotion, Stewart attempted to make an example of him. Carver secured Walker a promotion to captain and a move to the new RAC training centre at Belsen as technical adjutant, in one stroke removing a problem from the GREYS whilst not penalising the 'square peg'. A youthful, unconventional officer with undoubted technical skills, Walker was always likely to find favour with Carver. Carver was also unlikely to side with an older and traditional officer from a wealthy background but he understood the unwritten rules and used them carefully.

Brigadiers could, as this section has illustrated, exert a powerful influence over the day-to-day running of the brigade and units within it, dictating who progressed in rank and who was removed or

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⁵⁶ A point emphasised in his obituaries in both the *Telegraph* and the *Guardian*.

⁵⁷ Article entitled 'The Selection and Promotion of Army Officers' (1954). Papers of FM Lord Carver (IWM).

⁵⁸ Murray Walker, *Unless I'm Very Much Mistaken* (London: Collins, 2003) p.54-6.

side-lined, at least as far as more senior battalion and regiment officers were concerned. They could also try and set a tone or climate across their formation, as both Currie and Carver undoubtedly endeavoured to, but this was always dependent on the material they were given to work with; the parts that combined to form the sum.

Regimental Styles

The fundamental importance of the regimental system and its role in shaping the often quite different organisational cultures within the army has already been remarked upon. The system's specific influence upon leadership requires some further, more detailed, examination. The relative absence of formal leadership training at a basic level, both as part of recruit training and on officer and NCO cadre courses, appears to have gone largely unquestioned. In an outlook which likely grew from similar roots to the casual and ad hoc approach to doctrine, 59 the British Army of the early twentieth century preferred to leave regiments and battalions to set their own rules about the way leadership was taught and exercised. Indeed, John Adair has argued that the 'conceptual landscape' mentioned earlier precluded formal, doctrine-based leadership training in the 1930s and '40s.60 This changed slightly from late 1942 onwards when psychiatrists and psychologists were engaged by the army to lecture on 'man-management' during the OCTU training of officer candidates.⁶¹ Nonetheless, this remained a comparatively minor element within their instruction and it had no parallel in NCO training. Leadership thus remained, primarily, an issue for units to control. It is clear that assumptions about class and background, combined with faith in the abilities of units to select the 'right men' with innate leadership qualities, meant that the army assumed this area would largely look after itself. 62So, how did this play out at the micro level in the units within a brigade?

⁵⁹ This is covered in depth in the chapter on tactics, but see House, *Combined Arms*, p.47-8 and French, *Churchill's Army* p.21-2.

⁶⁰ Adair, p.67.

⁶¹ Hugh Murray, The Transformation of Selection Procedures: the War Office Selection Boards.

⁶² An issue Carver acknowledged and criticised in the article 'Leadership' in 1949. Papers of Lord Carver (IWM) Box 2.

A brief summary of the social background and ethos of each unit is contained in the introduction to this work and gives some understanding of how the individual regiments approached leadership, the selection of leaders and the expectations regarding them. This will be returned to, along with the role of the units, as this was another critical factor in the way they were led. As was shown in the introduction, the King's Royal Rifle Corps enjoyed a reputation for being both 'smart' and influential and consequently the regiment was able to attract ambitious officers drawn in by the prospect of potent networking opportunities⁶³ and influence whilst still maintaining a tradition of charismatic and paternalistic leadership rooted in an aristocratic model of officership. Such leadership was certainly highly regarded by many senior officers in the British Army at the time. 64 Its effectiveness is hard to assess. It certainly resulted in higher levels of officer casualties; officers in the infantry and armour suffered disproportionately greater casualties across the British Army, 65 but 2 KRRC's are slightly above this average. During the first 48 hours on the Sangro in 1943, the battalion had 11 ORs and 3 officers killed; the proportion of wounded (who were far more numerous) was similar,66 and the ratio in Normandy was at times even higher.⁶⁷ The battalion was also one of only two units of the brigade to have a CO killed in action during the period.⁶⁸ This was a direct result of the aggressive and 'example-setting' style of leadership that the regiment expected its junior officers to show; it was what one could describe as the classic aristocratic infantry officer model, 'a gentleman and fearless'.69

⁶³ French, *Military Identities* p168-9 and Beevor, *Inside the British Army* p.256.

⁶⁴ See French, ibid Chapter 6 and Ellis, *The Sharp End* p.192-226.

⁶⁵ French, Churchill's Army p.77-8.

⁶⁶ WO 169/8861, 4th Armoured Brigade casualty return, November 1943. TNA, Kew.

⁶⁷ On Aug.16th B and C Companies lost 4 officers killed and 3 wounded with 2 ORs killed and 12 wounded. WO 171/1327 War Diary of 2 KRRC (1944) TNA, Kew.

⁶⁸ Lt. Col. Ronnie Littledale on September 1st, 1944, WO 171/1327. The other CO was Maj. Skelton, acting CO of 3/4 CLY in February 1945, WO 171/4697, TNA, Kew.

⁶⁹ See the previous section of this chapter for the origins of this phrase and a discussion of its meaning.

44 RTR, one of the brigade's armoured regiments, was very different. The armoured regiments were less fashionable; the lifestyle of officers was less expensive⁷⁰ but greater technical knowledge was required. The latter factor was a quality almost frowned upon in the older infantry and cavalry regiments. As Robert Kershaw has observed, 'Tank Corps officers appeared more focused and intensely preoccupied with their profession.'71 This was an inevitable product of the strongly technical nature of their role. Also, as a TA unit, the culture of the battalion was somewhat different to that of a regular one. David French has noted (looking at TA units during both World Wars) that '[o]fficers and NCOs usually knew their men in civilian life, and relations between all ranks tended to be less formal than in regular units'.72 In addition, those armoured units that were not formerly cavalry units had a very different ethos and atmosphere from both their fellow ex-cavalry tankers and the infantry. Indeed, in 44 RTR many older infantry officers and NCOs were found unsuitable after conversion, that is, were unable to cope with the new technology and the faster pace of operations it imposed. Consequently, there was a 'weeding out process' and a 'large intake of new chaps'.⁷³ However, by late July 1944, a sergeant in 44 RTR was still able to write in his diary, 'Despite all the knocks we have had, this is still a very happy close-knit unit, very sure of its capabilities ... the result of good leadership. We are lucky with Hoppy [the CO, Lt. Col. Hopkinson] and most of the officers.'74As a contemporary reflection, this carries weight; albeit that it is a single NCO's opinion, he believed they were well led. Anthony Bashford also later recalled that "overall, we had good leaders". 75 It should be mentioned that Hopkinson remained in command of 44 RTR throughout the period under consideration, a time when such leaders were under close and uncompromising scrutiny and were frequently replaced.⁷⁶

⁷⁰ Carver, *Out of Step*, p.26-28, a factor in his choices. See also French ibid p.50-57.

⁷¹ Robert Kershaw *Tank Men* p.67.

⁷² French *Military Identities* p.219.

⁷³ John Mallard, 44 RTR, quoted in Kershaw, *Tank Men* p.69.

⁷⁴ Delaforce, ibid, p.81. Diary of Sergeant, later Captain, Tirbutt.

⁷⁵ Anthony Bashford (44 RTR) Reel 6, 12907, IWM Sound Archive.

⁷⁶ Indeed, Hopkinson was Carver's deputy in his absence; see Carver p.206 and WO 171/4314 January 1945, TNA, Kew.

The brigade's other units were a mixture of many of the elements highlighted above. The Royal Scots Greys (GREYS) were another old and smart regiment. Murray Walker, who later became well known in motor racing and broadcasting, was an officer of the GREYS and subsequently stated that he believed he had only got in because they mistook his whole name for his surname.⁷⁷ He recalled them as 'very cavalry, very regular, officered by moneyed country gentry'. 78 3rd County of London Yeomanry (3 CLY)⁷⁹ was a pre-war TA regiment. Yeomanry TA units were considered 'smarter' (they had originated as cavalry) but were certainly not in the same league as the GREYS or KRRC. The CLY were amongst the first TA units to mechanise. 80 4th Regiment Royal Horse Artillery (4 RHA), the brigade's artillery, was a regular unit. Generally, the artillery had a reputation for professionalism and technical expertise; they were widely regarded as the most consistently effective arm of the British Army.81 Leadership here tended to have a more technocratic character of necessity; as the war progressed, artillery officers were expected to master more and more complex procedures and equipment.⁸² Once again, one can see the impact of the functional structure as defined in Kirke's model. The regiment's commander, Len Livingston-Learmouth, was what might be termed a colourful character. A discussion of his methods, flaws and impact will help to illuminate some important issues concerning leaders and leadership within the brigade. He was in fact far from the stereotyped artillery officer. Robin Dunn, who had served in 4 RHA, discussed his leadership: 'he was a born leader and the only officer I knew whom the troops would cross the road especially to salute'.83 He was notoriously foul mouthed, could be flippant, threw boozy parties when away from the front and was not a diligent administrator.84 An anecdote related by Dunn, which occurred in North Africa early in 1942, gives a good flavour of Livingston-Learmouth's leadership style:

⁷⁷ Murray Walker, *Unless I'm Very Much Mistaken* p.43.

⁷⁸ Walker, ibid.

⁷⁹ From July 1944, they became 3/4 CLY when they merged with 4 CLY of 7 Armd Div.

⁸⁰ Andrew Graham, *Sharpshooters at War* (1964), Author's foreword. Also visible in the photos of Jimmy Sale, NAM

⁸¹ French, Raising Churchill's Army pp.253-58 and John Buckley, Monty's Men p.41-42.

⁸² Buckley, Monty's Men p.41-2.

⁸³ Dunn, p.80.

⁸⁴ Dunn, pp. 65, 80-84, 284 and Carver, p.208.

When he was told ... he was to leave the battery on promotion, he collected all ranks round his jeep, stood up on the bonnet and said 'You and I have been through a lot together. We were evacuated from Dunkirk and Greece and now we've been up and down this fucking desert too many times – and I still think you are a lot of bastards.'

The troops loved it and cheered him to the echo.⁸⁵

In the right circumstances, the right kind of humour is a powerful aid to leadership. ⁸⁶ Plainly, there were also issues with his leadership as well. Carver, whilst stating he was 'a splendid fighting gunner', ⁸⁷ also thought 'he was idle and totally neglected the administration of his regiment'. ⁸⁸ He was a popular leader with the ability to manage morale effectively and good technical/fighting skills but was also a poor manager in the administrative sense, capable of being disruptive, and a difficult conundrum for seniors to negotiate. Livingston-Learmouth certainly was not a toxic leader, and if one can see elements of incompetent leadership in accounts of his actions, they exist within a relatively narrow band of activities. This serves to remind us that even good leadership can be flawed and might not deliver in every area even whilst having an overall positive effect on followers and the organisation. Livingston-Learmouth's sacking was blocked by the CRA of 2nd Army, Brigadier Jack Parham. Carver believed this was because Parham resented handing over 4 RHA to the brigade. ⁸⁹ However, it seems more likely that Livingston-Learmouth, a popular and well-connected officer, was able to mobilise support from within his own arm. ⁹⁰

Units within the brigade had different ideas about leadership that were shaped by regimental traditions, social background and previous experience. Even so, there were many commonalities and a good degree of 'corporate identity' (that is, the British Army), and evidence suggests this

⁸⁵ Dunn, p.80-81. Livingston-Learmouth was leaving 2 RHA.

⁸⁶ Caroline Rosenberg, Arlene Walker and others, 'Humour in Workplace Leadership: A Systematic Search Scoping Review' in *Review, Frontiers of Psychology* (2021) 12:610795.

⁸⁷ Carver, ibid.

⁸⁸ Carver, ibid.

⁸⁹ Carver, p.208.

⁹⁰ Robin Dunn believed this to be the case; Dunn, p.81.

increased as the war progressed,⁹¹ but nonetheless, there were very real and marked differences. Also, importantly, the different arms retained variations in ethos and leadership style that were an inevitable product of their differing roles and histories with, naturally, the greatest influence being the way the units fought. These distinctions continued to have an impact on leadership. To illustrate this, let us consider officers in 2 KRRC and 44 RTR, as some of the differences between their respective cap badges have already been discussed. As armoured officers, those in 44 RTR were in control of smaller numbers of troops. A lieutenant was typically a troop leader and responsible for four tanks and thus twenty men including himself. The equivalent in an infantry battalion commanded a platoon with around thirty-six men, although there was some variation and platoons were often under strength. Tank crews fought, lived and travelled in closer proximity than almost any other group in the army. Their claustrophobic existence certainly affected officer-men relationships and fostered a more informal atmosphere. The different kind of discipline and officermen relations within the armoured regiments was widely noted and vexed some senior officers from traditional backgrounds. 92 Stuart Hills, a junior officer in an armoured regiment, later wrote, 'Living so close to each other we tended to drop all formality and the crew called me by my Christian name, yet in action strict discipline prevailed ... trust was a key commodity, because our very lives depended on our ability to work well together.'93 When the Royal Armoured Corps issued its own leadership guidance in 1944, it was clear that 'a tank crew is a little world of its own'.94 It is interesting to note to what degree, if any, this 'bled into' the non-tank units within the brigade as part of both the formation's loyalty/identity structure and the functional structure. Reports and personal accounts seem to reflect the fact that most motor battalions were different to the line infantry in their atmosphere and ethos.95

⁹¹ French, *Military Identities* p.282-84.

⁹² Carver, ibid, p.203, leading to his falling out with his superior, General Horrocks. Also Kite, ibid, p.386-7.

⁹³ Quoted in Kite ibid p.384.

⁹⁴ The Royal Armoured Corps: Junior Leadership p.3. Tank Museum Archive, Bovington.

⁹⁵ Of particular interest here is this researcher's interview with Charlie Jeffries, ibid. He was transferred from the RB (Mot. Bn) to the HLI and found them utterly different.

Cap badge loyalty/identity was a function of the overall army identity but also of individuals. It can be seen, as Kirke's model shows, that degrees of identification varied depending on an individual's outlook and experience and a regiment's ability to 'imprint'.96 Likewise regional identity, which was a major factor in units or formations with a strong city, area or home nation identity. This method of recruiting had a long tradition within the army; it was a central element of the regimental system and was believed to enhance cohesion. It was also strongly linked to public perceptions of parts of the army and indeed the areas they recruited from but it could also cause problems. The Salerno mutiny of September 1943 was caused in large part by Northumbrian and Scottish veterans being forcibly redeployed into other regional formations.⁹⁷ As the war progressed, it became increasingly difficult to allocate new recruits on this regionalised basis. The 4th Armoured Brigade, like every other formation, was subject to all of these influences; however, it can be seen that the impact of regional identity was minimal as the units within the brigade had a wide geographical dispersal. 2 KRRC were chiefly Londoners, although there was a sizable minority from the major cities of Northern England, and 3 CLY also mainly drew from London and the Home Counties. The Royal Scots Greys chiefly recruited in Scotland, although not in any specific area, and 44 RTR were based in Bristol. Arguably, this lack of regional identity helped develop a stronger formation identity and even helped co-operation with other formations, particularly the regionally based infantry divisions to which they were often attached. There was none of the North versus South or Scotland versus England friction which was often apparent.98 It also meant that when replacements from outside the original recruiting areas began to arrive it had less of an impact. In support of this argument, we can note that 49th Infantry Division, another formation with an eclectic mix of units (comprising battalions from Yorkshire, Leicestershire, Essex and Wales) was widely assessed as performing well.99 It weathered high levels of replacements following some intense periods of combat in Normandy and the allocation of an entirely new brigade to its composition whilst maintaining a high degree of

⁹⁶ For a good discussion with numerous examples, see Allport, ibid, p.283-84.

⁹⁷ For a detailed account of events and motivations, see Saul David, *Mutiny at Salerno* (London: Conway, 2005).

⁹⁸ French, Military Identities Chapter 9.

⁹⁹ Forrester ibid pp.55, 255 and French Churchill's Army pp.80, 265.

cohesion and good morale.¹⁰⁰ Both the German¹⁰¹ and the American¹⁰² armies approached regional recruiting and organisation very differently to the British.¹⁰³ In comparison, the British system clearly contained some flaws not seen in the other two but arguably also contained strengths, particularly when compared to the USA's replacement depot method.

Overall, the brigade was shaped by both the units which comprised it and the experiences that the formation had been through collectively. In addition, training had an impact on this brigade identity. As will be seen later in this thesis, well-organised and meaningful training, planned by the brigade for units within it, helped to foster closer co-operation and mutual trust. ¹⁰⁴ The role of leadership both sits alongside these elements and, in part, springs from them. Prior to the period under consideration, the brigade had changed its structure several times. This was far from unusual in the British Army of the time, a result of casualties and frequent reorganisation of the Orders of Battle for formations in attempts to improve performance. ¹⁰⁵ Thus, some of the autumn 1943 constituent units had not previously been part of 4th Armoured or 4th Light Armoured Brigades. ¹⁰⁶ However, crucially, every element of the brigade had been part of Eighth Army and seen action in North Africa. The elements of the British Army deployed in North Africa were its only parts in constant contact with the

¹⁰⁰ Andrew Holborn, *The 56th Infantry Brigade and D-Day* p.147-48 and Delaforce, *The Polar Bears* (Stroud: Fonthill, 2013) p. viii.

¹⁰¹ What follows is chiefly based on a US Army intelligence document on the *Ersatzheer*, *The German Replacement Army* (1944) N1429A, NARA.

What follows is chiefly based on Stephen Ambrose, *Citizen Soldiers* (London: Touchstone, 1997).

The German system was based around a parallel army, the *Ersatzheer*, which had a presence in each *Wehrkreis* and was responsible for recruitment, basic training and the reintroduction of men returning after periods of illness or injury. Whilst the system was ostensibly linked to recruiting by districts, this was neither strictly adhered to nor considered an important factor within the Wehrmacht. The whole system was overseen by the army high command to ensure uniformity of standards and priorities across the districts. The US system was completely divorced from any regional or local allegiances. Recruits were allocated for their basic training to large replacement depots which provided soldiers *en masse* to wherever they were required. The American system was criticised extensively both during and after the war by both former soldiers and commentators on the basis that recruits were sent to units as needed and often with only small numbers of people they had trained alongside. Also, recruits arrived without any prior knowledge of, or contact with, the receiving unit, although it should be noted that the system certainly did provide uniformity of training across the depots.

¹⁰⁴ Hart, *Colossal Cracks* p.25 and Allport, ibid, p.236. Carver notes the importance of training units that operate together as an asset to both morale and tactical skill in '4th Armoured Brigade in Germany' (1945) Papers of FM Lord Carver, IWM.

¹⁰⁵ French *Churchill's Army* chapters 6 and 7 and Wake and Deedes, p.75.

¹⁰⁶ Delaforce, *Monty's Marauders* pp.7-63.

enemy in the period late 1940 to late 1941. Even after this, they remained the most substantial overseas active service commitment for most of 1942. The impact of this shared experience was significant. As one team of leadership theorists have argued, 'practitioners also know that leadership is relative to the group in question ... we suspect that two considerations are important. The first is the group's developmental history; the second concerns the major tasks the group performs.'107 This thesis strongly supports that argument. Shared experiences both bond groups and teach them lessons. Those groups that evolve a successful system for processing this and develop as a result will show more effective leadership. However, different groups will respond differently to the same circumstances, and the experience of the desert war did not always produce reliable and motivated formations. The perception that some veteran units from Eighth Army performed badly in North-West Europe has been widely discussed, as mentioned earlier. There were certainly some issues in 7th Armoured Division earlier in the campaign, notably around their infamous engagement at Villers Bocage. 108 Nonetheless, any formation in the British Army comprised of, as already seen, different units and the ways in which these integrated with each other were important, as were the unit ethos and the individuals leading the unit. Some formations integrated well, others less so. Some units, or even formations, were 'broken' by certain experiences. 3 CLY in 4th Armoured Brigade became 3/4 CLY when 4 CLY from 7th Armoured Division was merged with it after Villers Bocage and GOODWOOD. The 4th regiment had suffered too many casualties and was felt to be demoralised. It was replaced in 7th Armoured with a fresh unit.¹⁰⁹ This work will return to that amalgamation in the chapters examining morale.

The types of units involved, that is either regular or Territorial, affected the leadership culture of the brigade. Two of the armoured regiments were TA units, and a significant number of pre-war 'Terriers' were still with them in late 1943. The motor battalion and another armoured regiment came

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¹⁰⁷ Robert Hogan and others, 'What We Know About Leadership: Effectiveness and Personality' in *American Psychologist* (1994) Jun;49(6):493-504 p.17.

¹⁰⁸ Forrester ibid p.53-3.

¹⁰⁹ 4th Armd Bde HQ War Diary WO/171/601 TNA, Kew.

from long-established cap badges with a smart reputation; these both contained significant numbers of pre-war regulars in late 1943. One would expect, as discussed, a more informal and club-like atmosphere in the former¹¹⁰ and more paternalism and traditionalism in the latter. However, as the war progressed, the inevitable processes of attrition through death and injury and movement caused by promotion and reorganisation led to a far greater degree of blending within units of regular, TA and conscripted troops of all ranks. Many contemporary accounts from people serving in the army¹¹¹ at the time have remarked that this substantially smoothed out the differences between these strands of the army.¹¹² The brigade weathered this particularly well during the period under examination because the episodes with heavy casualties (the Sangro, Normandy and the fighting in Germany) were interspersed with fairly long periods with either comparatively few casualties (Northern France and Belgium in late summer 1944) or none at all, as in the four months reequipping and training in England prior to Normandy. These periods assisted continuity and cohesion.

Organisational culture and cultures and role and rank all affected leadership styles. The factors surveyed here allowed the brigade to build up its own 'house style' of leadership combining the elements noted. The flavour of these separate elements always remained stronger in their originating units but a hybrid style began to dominate. This hybrid evolved organically, beginning to develop under Currie and actively encouraged by Carver, but there is no evidence of a top-down approach to creating this other than both men's commitment to creating a climate of professionalism and grip. A key factor in disseminating this was the posting of officers (and in some cases senior NCOs) to Brigade HQ for various staff or administrative functions and the rotation of individuals

¹¹⁰ French, *Military Identities*, Chapter 8.

¹¹¹ See 'Constructing Citizen Forces: Social and Political Perspectives' in *Ares & Athena* issue 6 (November 2016) CHACR. For a detailed and fascinating study of this effect on a small scale, see David Hiscocks, 'Old Comrades: A Study of the Formation of Ex-military Communities in Tyne and Wear since the Great War' (unpublished PhD thesis, University of Durham, 2015). Also, it is notable in the veteran testimony used that those who joined the brigade from 1944 onwards were seldom aware if officers or NCOs mentioned were regular, TA or conscript soldiers.

¹¹² Kershaw, Tank Men, p.177.

between HQ and the units that resulted. This same process occurred in most formations, and certainly those with greater structural longevity, but 4th Armoured, through that variety of factors seen above, achieved a more potent hybrid. The next chapter will set out evidence to support this argument.

Chapter 3. Leadership in Action

The preceding two chapters have already looked at several examples of how leadership was applied and worked within the brigade and examined the role of the commander in some detail. However, the greatest proportion of leadership was exercised by junior officers and NCOs. This was the case because junior leaders were the most numerous of all leadership roles and they also had the most frequent opportunities to provide face-to-face leadership. This chapter will consider how their leadership functioned in terms of the approaches and methods used and their effects in the most testing environment, at the 'sharp end'. This will be illustrated through some specific examples drawn from operations across the period under consideration. This material will highlight the way in which the factors discussed here interwove to create effective leadership, adequate leadership and, occasionally, ineffective leadership.

Junior Leadership in Action

The importance of trust and confidence and the ability to mobilise these in groups, are, as has already been demonstrated, vital factors within combat leadership. The influence of individual officers and NCOs who were able to use 'example' and 'persuasion/inspiration' in highly testing circumstances to activate these factors can be seen across the period under consideration. When 2 KRRC crossed the Sangro to capture the high ground immediately beyond the river (the Li Colli ridge) in November 1943,¹ the plan in place initially called for an attack by the battalion on the night of 21st—22nd November. This was aimed at capturing Casa Casone, a large farmhouse on an escarpment of the Li Colli ridge. The battalion attacked across the Sangro on the night of the 21st. It was a cold night and the fording point was at least waist deep on most men. Ted Wood and Fred

¹ 'The 4th Armoured Brigade in Italy', document appended to Brigade HQ war diary 1943, WO/169/8861 TNA, Kew, also in GREYS papers, RSDG Museum, Edinburgh.

Cooper both recalled the extreme discomfort.² Despite a huge supporting artillery barrage, the attack failed, with significant casualties, and the battalion was forced to fall back, crossing the river under fire. Due to the foul weather, 5 Corps took the decision to postpone operations. They resumed on the night of November 27th. Surprisingly, 2 KRRC were to reprise their attack on Casa Casone on the first night. Following the bloody and unsuccessful assault, it is clear that an examination of how the leaders of 2 KRRC motivated and inspired their men to do almost exactly the same thing again only a few days later is highly relevant to the question of leadership.

As stated earlier, 2 KRRC's officers had sustained casualties even above the already heightened average rate for infantry officers during the initial attack. The ORs of the battalion would have been well aware of this. Ted Wood³ recalled his platoon's officer, Lt. Cochrane, speaking to the men about the upcoming attack. His approach clearly rested on the factors of 'example' and 'persuasion/inspiration' set out earlier in the chapter, an approach chiefly reliant on behaviours. He explained that the operation was important and that the Allied forces needed to get across the Sangro. They'd done it before and were in the best position to do it again. He would lead the platoon again. He appears to have been well regarded despite being only 21 at the time (he'd seen action in Tunisia already)⁴ and had the key element of trust. In addition, one should pay attention to the fact that the retreat from Casa Casone on the morning of the 22nd was, according to all the sources, conducted in both a skilful and an orderly way. Given the circumstances, this could easily have been a rout, and it speaks strongly of good leadership from NCOs and junior officers. Cochrane (presumably like all the other platoon commanders) was able to inspire his men to take part in the second assault. A different plan had been made for this, and perhaps this fact helped with motivation and morale. The position was to be approached entirely by stealth with no supporting barrage thus aiming to 'catch the Hun by surprise'. Evidently, the men of C Company

² Veteran interviews. Ted Wood (Researcher) and Fred Cooper (IWM).

³ Ted Wood, interview with the researcher, 10/06/2012.

⁴ Wake and Deedes, Swift and Bold, p.120 and p.143.

⁵ See Delaforce, *Monty's Marauders* p.69-70 and Wake and Deedes, p.181.

⁶ Wake and Deedes, ibid.

(and the other companies) had trust in their officers' and NCOs' abilities to plan and lead another attack. The second attack proved to be successful. Sadly, but perhaps rather unsurprisingly, Lt. Cochrane was killed the next day when, going forward to recce roads around the ridge, his vehicle ran over a German mine.

Inspirational leadership could also come from NCOs. Douglas Browne (44 RTR), who was mentioned earlier as someone who was put forward for a WOSB but failed it, was a sergeant and troop commander throughout most of 1944 and 1945. His actions in March 1945 led to his being awarded a Military Medal. The citation⁷ for this is unusually long and effusive; it closes by stating that 'the determination and individual gallantry displayed by this NCO have been a continual inspiration to all who have served with him'.8 Sergeant Browne led his troop of four Shermans and a platoon of infantry during the advance to the River Issel in Germany. They came under fire from a group of German SP guns and towed artillery, in cover several hundred metres away. One of Browne's tanks was knocked out and the infantry were taking casualties. It was at this point that Browne's tank took bold and decisive action. Going forward at full speed and swerving to put off the German gunners, his tank rapidly closed down the enemy guns, reducing the range advantage that favoured them and presenting a more daunting threat to their crews. Identifying cover in a stand of trees, Browne moved his tank into this and began firing at the German positions. When their field of fire was restricted by an overhanging branch, Browne left his tank and hacked the branch down with equipment from the tank's toolkit whilst under fire. Accurate shooting from his tank subsequently damaged one SP gun and knocked out a half-track, causing the Germans to retreat. As if this wasn't enough, later on, when held up by German 88mm guns, Browne again left his tank to go forward on foot to recce a flanking move on the guns. This was done successfully, despite being under heavy fire, and the guns were captured along with some 100 prisoners.

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⁷ WO/375/56/30 TNA, Kew.

⁸ WO/375/56/30.

There is an important point here. Setting aside Douglas Browne's incredible individual bravery, we have to remember that a tank was a crewed vehicle which needed several men to function. The commander was neither the driver nor the gunner and merely instructed the soldiers carrying out these tasks. Recalcitrant crews could and did thwart the plans of NCOs or officers commanding them.9 Browne was able to 'take his crew with him' via the factor of 'example' through his own calm courage and through trust founded in their awareness of his high levels of professional skill. Browne had been with 44 RTR since the start of the war, volunteering shortly after its outbreak. He had fought in North Africa, Italy and Normandy and been a tank commander for well over a year and a troop commander for several months at this point. In an interview with this researcher, 10 he stated that the thing he was proudest of in his military service was the fact that not one member of his crew had been killed whilst he was a tank commander despite his tanks being KO'd on several occasions. Indeed, only one of his crew had ever been seriously wounded. He had clearly demonstrated the professional competence and lack of recklessness that engendered trust. His crew were thus willing to take part in bold, aggressive actions because they understood that they had a competent, skilled leader who could manage risk. This trust had wider implications for how units and the brigade operated but it required constant careful attention. This was sometimes not forthcoming.

'One or two sharp things about people':11 Problems with leaders

Not all leadership was inspirational or indeed effective. Even a formation that produced better than average leadership still had examples of inept or divisive leaders, and these can be used to illuminate some of the points considered already. The previous chapter discussed a regimental

⁹ John Buckley, *British Armour in the Normandy Campaign 1944*, Chapter 8 and Cheetham, 'Veterans' Oral Testimony' p.264.

¹⁰ Douglas Browne, interview with the researcher, 24/11/2014.

¹¹ See reference to Sandy Stowe's letter below.

commander with terrible 'admin' and a reputation for 'high jinks'. Yet, he was nonetheless a highly effective combat leader and a positive influence on the unit's morale. There was also the instance of a junior officer in an armoured unit who mismanaged disputes between his soldiers and who was not good at map reading. The latter case certainly seems to be an example of ineffective leadership. However, it is important to be aware that the officer concerned had only joined the battalion in late May 1944 and the incidents concerned occurred in late June and early July. It is possible that both errors were the result of inexperience and a lack of confidence. 12 However, it appears he was commissioned in September 1943 and came to 44 RTR from another unit, ¹³ and, more importantly, an incident in September 1944 near St. Odenroede in Holland sheds further light on the officer's abilities. This small skirmish is highly unusual because it not only involved people who Doug Browne knew well and who had told him about it, but also, more remarkably, it was studied in depth in a short book written by the brother of one of the troopers killed in the engagement. This book, Proven Beyond Doubt (1995), 14 was the result of decades of research by George Thorogood (also a veteran of the Second World War) who sought to understand the circumstances of his younger brother's death. The book is meticulous in its approach and reconstructs events in a surprisingly forensic manner. The author interviewed a number of witnesses, including several soldiers from 44 RTR and Dutch civilians.

Douglas Browne recalled that he was in the hospital at Bayeux for a while, towards the end of the Normandy fighting. This was a result of malaria he had contracted in Italy. He stated, "that was very unfortunate, not for me" but because "my tank crew ... an officer who never been out with them before, came over and took them over ... when I re-joined them in Holland, my driver and wireless operator had both been killed". As already discussed, Browne was proud of his record of minimal casualties: "I often think if I'd been commanding the tank, they'd still be alive." This was the incident

¹² 44 RTR, Monthly Return of Officers (May) in WO 171/873, TNA, Kew.

¹³ Quarterly Army List, 1944, p.393.

¹⁴ George Thorogood, *Proven Beyond Doubt* (Solihull: Thorogood Publications,1995). His brother was Trooper John Thorogood of 44 RTR who initially had no known grave. George began his research in 1946. ¹⁵ Douglas Browne. Interview with the researcher.

near St. Odenroede. The officer concerned was Lt. Cohen. In the 1980s, George Thorogood was able to speak to Cohen and get an account from him. ¹⁶ It was during the operations in support of MARKET GARDEN. Cohen's tank and one other advanced up the St. Odenroede road as directed. They were supposed to get infantry support from US Airborne troops who were in the area. However, these had now been ordered to stay in their foxholes and remain on the defensive. Cohen decided to push on despite this and despite the road being narrow and surrounded by numerous areas of woodland and small villages. Shortly afterwards the tank was hit by two AP rounds in rapid succession, killing the driver, catching fire, and causing the vehicle to hit a tree. There was a confused bail-out and it appears that everyone had suffered some wounds. Cohen stated that he tried to drag John Thorogood out of the tank but realised he was dead. This was contradicted by Dutch witnesses, who said John was shot by nearby German troops as he was running from the tank. Cohen and the wireless operator escaped. Cohen was also wounded and spent several weeks in hospital. Additionally, it was notable that John's squadron commander wrote to Mrs Thorogood (John's mother) to express his condolences and also to say how much he personally missed John, who'd been with the squadron for nearly two years. ¹⁷ No letter was received from Lt. Cohen.

The purpose of this examination has not been to demean or demonise Lt. Cohen. He clearly had the requisite physical bravery and remained in a dangerous frontline role for several years. He was not a toxic leader and not one who displayed immense incompetence either. What this example does show is that not all of the leaders in the brigade were effective and it also serves to give a potent illustration of those core competencies and skills required for battle leadership that were discussed earlier. Douglas Browne was careful not to single Cohen out for criticism and did not mention him by name, but shortly after his comments noted above, he added, "I didn't believe in going in blindly against guns." He talked about advancing slowly, making good use of cover and using binoculars frequently. He would often dismount to get a better view, saying it was easier to

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¹⁶ Thorogood, pp. 27,82-83.

¹⁷ Thorogood, p.27-28.

spot artillery like that and once he knew where it was "I could take 'em on." Some of these tactics are clearly recognisable in the account of his MM-winning actions. It seems that Lt. Cohen lacked both the requisite soft and hard skills from the evidence available. It is also notable that for someone commissioned into a frontline unit in 1943 it was relatively unusual to still be a lieutenant at the end of the war.¹⁸

There were other examples where ineffective leadership can be identified. Descriptions of some instances were couched in rather euphemistic terms and the sources are sometimes careful not to name individuals. Charles Lewer recalled an officer in Normandy who had 'gone funny' 19 and after a while disappeared without explanation. Recalling Operation JUPITER, ²⁰ Sandy Stowe, a platoon commander in 2 KRRC at the time, stated that his account will 'say one or two sharp things about people which might not be too popular'. He goes on to mention another officer of his company who, when under fire from German mortars and artillery, found cover and stayed in it, even refusing to let Stowe into that cover to speak to him. This was at a time when it was necessary to adjust the company's position to prevent heavy casualties from what was obviously observed fire. He implies that the officer had stopped leading. He later reappeared, making strenuous efforts to reassert his authority, much to Stowe's displeasure. The officer concerned had been with the battalion for some time and appears to have generally had a good reputation. Both examples show the role of the physical and cognitive resilience discussed earlier and what could happen when this failed. This idea will be returned to in part three when morale is examined in more detail. The example shows how individuals who had previously been effective leaders could become ineffective leaders temporarily or even permanently.

¹⁸The majority of subalterns with the brigade's armoured regiments who were there for longer than a year were generally made temporary captains, although this could be interrupted and thus slowed by periods when they were in hospital or seconded elsewhere.

¹⁹ Charles Lewer, interview with this researcher.

²⁰ Sandy Stowe, letter to Toby Wake (September 1986). Wake had been his company's OC. The letter gives a frank, honest and beautifully written account of JUPITER. FM Lord Bramall Papers, University of Buckingham.

It is clear, then, that there were ineffective leaders within the formation. Some of these were cases of people who were simply not up to the job but who had avoided detection in training. Others were people who were either promoted beyond their capabilities or whose ability to lead waned over time. The battalion/regiment commanders whom Carver sacked largely fell into this second group. Sandy Cameron in 3 CLY has already been mentioned, but there was a similar story in late March 1945 with Frank Bowlby, who commanded the GREYS. Bowlby²¹ had a solid reputation and had been second in command for some time when Tim Readman, the preceding CO, was moved to a staff role supporting the senior RAC officer for 21st Army Group.²² Carver stated he had reservations about appointing Bowlby but trusted Readman's recommendation. On taking command, Bowlby got the popular regimental MO, Johnnie Johston,²³ moved, sending him to 14 Light Field Ambulance. This seemingly inexplicable decision was not a good start. After the Uedem-Sonsbeck battle, Carver felt Bowlby was slow and lacked grip. He spoke at length to Bowlby, who initially stated he was already going to sack one of his squadron commanders. Carver told him he needed to resign or he would give him an adverse report.²⁴ He was aware that Bowlby had recurrent malaria and proposed to use this as a face-saving story. Carver wrote, 'It was the most difficult and unpleasant interview that I ever had to face, and I believe that Frank never forgave me. 25 Aidan Sprot later recalled that Bowlby was deeply unhappy at leaving but that he was 'a very tired man' and most in the GREYS understood and even supported the decision.²⁶ None of this should be surprising. What is surprising is the ratio of effective leaders and the exceptional quality of some of these within the brigade. Comparisons with other formations are difficult to make. This is because one must not only be careful to compare something not too far from like with like but also because of the huge amount of research that is required to 'dig into' the types of incidents described above and thus assess motivations and outcomes thoroughly. The exceptions to the latter difficulty are those catastrophic

²¹ Enlisted in August 1939, promoted to captain in November 1942, and temporary major not long after. He won an MC at about the same time, *Quarterly Army List, April 1944*.

²² Carver, p.208.

²³ Popularity attested by Aidan Sprot, *Swifter Than Eagles*, p.152 and in an interview with Roy Griffis, 23192, IWM Sound Archive. Johnston had recently won the MC.

²⁴ Carver, p.214.

²⁵ Carver, ibid.

²⁶ Sprot, p.165.

failures of leadership which could not be glossed over and which required action from higher commanders outside the formation concerned. There are several of these to be found.

The collapse of 6th Battalion, Duke of Wellington's Regiment in Normandy is well documented.²⁷ This battalion was within 49th Infantry Division, which, after initial difficulties, performed well for the rest of the war. 6 DWR were disbanded, however, with their CO citing poor leadership from NCOs as a significant part of the battalion's problems.²⁸ 51st (Highland) Infantry Division was another formation that had clearly encountered issues. After acquiring a reputation for effectiveness in North Africa, difficulties began to emerge during its time in Italy and became more pronounced in North-West Europe. Troops of the division had been involved in the Salerno mutiny in September 1943,29 although, that incident apart, it was seen to have performed fairly well in Italy. However, from early on in Normandy, significant difficulties were identified. Poor morale, reflected in high levels of desertion and discipline offences, was matched by shaky combat performance, and 'one of Britain's finest infantry divisions' had become one of its worst'. 30 Anthony King places much of the blame on the division's commander in his thorough and persuasive article on the subject, and this reflects the thoughts of many senior British officers at the time. By early 1945, the division appears to have recovered and performed well again.³¹ Ineffective leadership could have dramatic negative consequences for fighting effectiveness across whole formations. Conversely, effective leadership could, in the right circumstances, have similarly widespread and dramatic effects.

²⁷ WO 205/5G, 'Report on the State of 6th Bn DWR' (June 1944), TNA, Kew. This is cited in Hastings, *Overlord*, p. 182-84, and D'Este, *Decision*, p. 282.

²⁸ WO 205/5G.

²⁹ Saul David, Mutiny at Salerno.

³⁰ Anthony King, 'Why did 51st Highland Division Fail? A case-study in command and combat effectiveness' in *British Journal for Military History*, Volume 4, Issue 1, (November 2017).

³¹ Tim Saunders, *The Battle of the Reichswald: Rhineland February 1945* (Barnsley: Pen & Sword, 2023) p. 15.

Empowering Leaders

At a wider level, there are clear examples of confident leadership across 4th Armoured Brigade, particularly later in the war, illustrating the points already discussed. As this part of the thesis has shown, confidence is a vital factor within leadership, allowing leaders to fully engage with followers and boosting the all-important factor of trust. In early August 1944, under Carver's command, the brigade was one of the first to capitalise on the German collapse and significantly up the tempo of operations. A subsequent chapter will consider this in more detail, but some relevant points relating to leadership require attention now. Carver later wrote, 'It was clear to me that the whole front was breaking up and that we could and should thrust forward more boldly.'32 4th Armoured were under the command of 53rd (Welsh) Infantry Division at this point and Carver argued intensely with General Ross, who favoured a slower-paced advance comprising set-piece attacks. Carver states that eventually Ross grudgingly agreed to his plan. The salient point here is that the brigade, supported by detached battalions from the Welsh, operated as a number of small battlegroups. acting in a coordinated but flexible and opportunist fashion. Moreover, the armoured regiment and motor battalion commanders leading these groups were able to interpret Carver's intent and adjust their own tactical plans to suit the rapidly changing situation.³³ This demonstrates that a degree of dynamism and confidence was established across company and battalion commanders within the brigade. Evidently, superiors (at brigade, division and corps levels) recognised that effective leadership was being delivered by these officers and trusted them to act appropriately, and, from a subjective, contemporary overview, this period certainly looks like one where company/squadron and battalion/regiment commanders were delivering most or all of the identified leadership elements. These commanders had strong professional knowledge and skills which in turn generated follower trust and confidence. Leaders were also affected by this confidence themselves, making decision cycles faster and more accurate.

³² Carver, Out of Step, p.197.

³³ See Wake and Deedes *Swift and Bold* p.254-60 for an account of this from 2 KRRC, of particular interest as the motor companies were split between several battlegroups.

Part One Conclusion

Part one of this thesis has shown throughout its three chapters that the most efficient and realistic approach regarding the understanding of the leadership element lies in the integration of the various attributes and skills into a single conceptual component containing what leaders are, know and do. Within this, effective leadership must encompass elements of both management and command; modern British Army guidance for trainee leaders has reiterated the importance and interconnectedness of management within the leadership sphere.³⁴ It would likewise incorporate the elements highlighted throughout part one pertaining to the expectations of subordinates, peers and superiors regarding officers and NCOs, being chiefly professional competence and physical courage. It is clear that the greater leadership concept consists of many different threads, but it is simpler and in fact more realistic to see them as interwoven into a kind of 'leadership fabric'. Thus, those who were providing most of the 'threads' discussed at a given point were providing leadership. Identifying where and when this was occurring occurs through three methods. Firstly, do contemporary accounts from subordinates ascribe the identified 'threads' to the person? Secondly, do primary source records (reports, citations, etc.) from superiors identify these elements in the person? And finally, and admittedly more subjectively, do their actions 'look' like they comprise effective leadership when viewed as part of the study? In the positive examples shown above, all three elements appear to have been met; in the negative ones, there are clear gaps in the required 'fabric'. The elaborated leadership effectiveness model (Figure 1) can be used to illustrate how this works and as a tool to focus on an individual's effectiveness.

Ultimately, the key consideration is whether the brigade's leadership, at all levels, was in some way exceptional; if it somehow produced a particularly strong section of this 'leadership fabric'. Did it form a 'meta-capability'? Clearly, in terms of commanders, the formation was lucky to receive two very capable and energetic brigadiers who handled it in what their superiors obviously believed was

³⁴ Developing Leaders: A British Army Guide. See p.5-7.

an effective manner. Their leadership was key in creating a climate that fostered professionalism and effective leadership. 4th Armoured Brigade was one formation amongst four armoured divisions, two armoured brigades and two tank brigades in the British contingent of 21st Army Group, yet it was consistently chosen to undertake what one veteran termed the "knottier problems".³⁵This was not just in Normandy, where its status as an experienced formation marked it out, but on into the rest of the North-West European campaign. It was not equipped differently to these other armoured formations in any significant sense and its members were not selectively recruited or specially trained. As Charles Forrester has argued, ³⁶ 4th Armoured Brigade was among a group of British formations whose leadership grasped Montgomery's methods and enthusiastically applied them, modifying and adapting practices as required and indeed developing approaches that 'bubbled up' from these formations to become 21st Army Group doctrine, an idea that will be returned to.

The reputations of both the units within the brigade and the brigade itself clearly helped to attract talented officers and indeed allowed the brigadiers to 'head hunt' officers who were well regarded from other formations.³⁷ It is striking that three subsequent chiefs of the general staff, Michael Carver, Roland Gibbs and Edwin Bramall, served in the brigade, two of whom would go on to be chief of the defence staff. No other formation of the Second World War British Army produced more than one post-war CGS. The elements of continuity and careful handling of morale, particularly by Carver, created a fertile ground for capable leaders to flourish at all levels, in turn leading to enhanced performance throughout the brigade. In addition, the units within the brigade included several with a tradition of professionalism and seriousness around their trade, something that was not always particularly well ingrained in parts of the British Army at the time. Both the RTR and the KRRC were noted for this. One explanation for the KRRC's success at producing senior officers, put

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³⁵ Anthony Bashford (44 RTR), 12907, IWM Sound Archive.

³⁶ Forrester 'Montgomery and his Legions'. A position advanced throughout the thesis.

³⁷ See, for instance, Michael Carver 'acquiring' Jim Stanton as brigade DAA/QMG, *Out of Step*, p.192. Also, Robin Hastings as CO of 2 KRRC after the death of Lt. Col. Ronnie Littledale in August 1944, although Hastings was then rapidly appointed to a staff job within 21 AG, *Out of Step*, p.200.

forward by commentators,³⁸ is the fact that the regiment actively encouraged professionalism and intellectual approaches to soldiering, things that, even in the thirties, were 'almost considered sharp practice'.³⁹ As discussed earlier, the RTR was similarly marked by its professionalism and, perhaps more importantly, by the fact that it embraced this approach. The point that Michael Carver had started his career in the RTR is significant. As already shown, Carver was interested in new ideas and new technology and expected others to be the same. He also understood the rules of leadership in the context of the time and place, as did Currie. Both men ensured these were followed, both personally and by their subordinates.

Of course, as already discussed, one cannot ignore the effect of patronage and nepotism. The current literature still seems to underplay the role of these in the command culture of the British Army during the Second World War. This seems to miss an essential factor within the comparatively small British Army, particularly amongst pre-war regulars and Territorials. Brian Horrocks, in his autobiographical account of his time in command of 30 Corps, *Corps Commander* (first published in 1977),⁴⁰ gives a strong flavour of this, relating how cliques and friendship groups formed within various training establishments and formations were an accepted part of life and influential.⁴¹ Being 'well-connected' was important, although on its own it could only provide limited advantages; but when combined with professional competence and the correct behaviour, this was a potent aid to ambitious officers, as Carver's career clearly shows. One could also suggest that the three post-war CGS posts were also linked to nepotism and 'in groups', but this probably does a grave disservice to the undoubted professionalism and intellect of all three men. The fact that they could point to wartime service in a formation with established credibility must have been advantageous, not by the time they became CGS, but certainly in the highly competitive journey through staff roles and formation commands in the post-war period. Nonetheless, a wider study of the informal networks

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³⁸ Beevor in *Inside the British Army* p.255-56, and noted by Lord Bramall in his interview for this study.

³⁹ Beevor, ibid p.256. French explores similar ideas in *Military Identities* p.176-9.

⁴⁰ Brian Horrocks, *Corps Commander* (London: Magnum Books, 1979).

⁴¹ Horrocks, ibid, influence of Staff College peers and staff, p.17-18 and throughout on the influence of associations formed in Eighth Army.

amongst middle-ranking officers in the British Army of this era is long overdue. Phil McCarty's recent PhD thesis (2021)⁴² concerning the careers of brigadiers who served in the BEF in 1940 is a welcome and carefully crafted step in this direction, but, of necessity, a limited one. Tracing these intricate webs of regimental, familial and educational associations is largely outside the scope of this study but their importance is clear and arguably remains so into the present day.

It was important, as discussed earlier, to have the ability to 'pick a good team', and, as the Adair and British Army models of leadership illustrate, developing team members by ensuring they had appropriate training and operational experience amplified this. Indeed, much of the brigade's upper leadership between 1943 and 1945 seems to have occupied that central overlapping spot on the Venn diagram neatly. The strong identity of the brigade as a cohesive team, the professional development of individual officers and NCOs across the formation and the ability to approach tasks with practised skill and a confidence derived from these features all show this.

So, in conclusion, how did the elements discussed here enhance the fighting effectiveness of the brigade? As discussed, a number of interlocking factors appear to have produced a hybridised approach to leading and managing units which was widely practised across the brigade and provided good leadership at all levels. Clearly, this was not uniformly the case, but it was sufficiently widespread to have had an impact. Effective leadership had reached a critical mass. The factors driving this can be identified as the regimental ethos and culture of the units within the brigade, the experience of previous operations acquired through a long period of active service, and, finally, the two brigade commanders. Both were exceptionally capable and created a climate that fostered professionalism and 'team spirit'. They were able to impose their grip across the formation and showed good judgement in choosing subordinates, which in turn had a cascade effect, putting

⁴² Phil McCarty, 'Point of Failure: British Army Brigadiers in the BEF and NWEF 1940, a Study of Advancement and Promotion' (unpublished PhD thesis, University of Wolverhampton, 2021).

effective leaders in position down to the most junior levels. The impact of these factors that are relevant to this study were threefold: the maintenance of more robust morale and cohesion, the retention of good discipline, and a rapid decision cycle, rooted in competence and confidence, which allowed a greater degree of tactical flexibility. These elements, as later chapters will show, form an important part of the composition of fighting effectiveness. The next section now turns to that tactical flexibility and expertise.

Part 2. 'If we all start thinking hard and pool our ideas, we shall outwit the enemy'*: Tactics and Lesson Learning: An examination of battlefield adaptability

^{*}Michael Carver (1944) from '4th Armoured Brigade Training Memorandum No.2', 4th Armoured Brigade files, Tank Museum, Bovington.



Illustration 2: Royal Scots Greys near Goch, February 1945

Chapter 1. Doctrine, Tactics and the Conceptual Landscape

The quotation in the title used for this part of the study is drawn from a report written by Michael Carver in Normandy, and this chapter will address how 4th Armoured Brigade endeavoured to 'think hard' and 'outwit the enemy'. It examines the 'process of learning' derived from operational experience and the consequent development of new combat practices and methods. This was undertaken by 4th Armoured Brigade operating at the tactical and 'lower' operational levels. These are the levels where the actions of individual formations and units delivered the most effect and where such bodies had the greatest freedom of action. Military effectiveness depends upon 'innovation and adaption';¹ this claim, which Pasi Tuunainen has made, is hard to refute. Tuunainen reviewed much of the literature on military effectiveness produced in the last thirty years. He demonstrates convincingly how this identifies that effectiveness, in part at least, derives from 'battlefield learning' and 'the adoption of the latest, combat-proven fighting methods'.² Similarly, Peter Mansoor has written that '[a]daptation in war is critically important ... militaries very rarely enter conflict with the doctrine, organisation, and tactics required to defeat their opponents'.³ The nature of armed conflict means it is unambiguously an adaptive and responsive activity, tactically, technologically and organisationally.

Armies must develop and adapt to overcome new threats and situations; the fact that their opponents undergo the same process produces a complicated feedback loop within the learning which is a distinct and important element influencing the process. The critical practices are the connected abilities to fight, learn and adapt. This chapter will show how adaptability, imitation and innovation were harnessed by the brigade to enhance its fighting effectiveness. The tactical level of

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¹ Pasi Tuunainen, *Finnish Military Effectiveness in the Winter War 1939-40* (London: Palgrave Macmillan, 2015) p.115.

² Tuunainen, p.18.

³ Peter Mansoor, What lessons do wars of the 20th century offer armies in the 21st? in The Skill of Adaptability: the learning curve in combat (Canberra: Australian Army History Unit, 2017).

activity was, this thesis argues, critical in increasing effectiveness.⁴ Tactical-level operations saw the highest pace of change in terms of new technology and new methods and formed a point where changes could have immediately discernible effects. Alterations within methods used by relatively small groups could sometimes have acute effects at critical locations and times.

To examine this, the next three chapters will reflect on not only the brigade's efforts to identify and record relevant experiences, but also training of the types that were conducted locally and the development of tactical standard operating procedures (SOPs) including those of an informal nature. These three chapters will address who gathered information on lesson learning with the brigade and its units and how this was assessed, and also how this was disseminated and converted into training or policy. Finally, and most importantly, they will consider what the impact of new tactical methods were on the brigade's operations and fighting effectiveness. In addition, and in parallel to these questions, the chapters will also examine the direct effects and influences of enemy activities on all of these processes and the role of climate and terrain upon both sides' ability to operate effectively. As these chapters will show, these last two factors are impossible to disaggregate from any study of fighting effectiveness or tactical methods and are subject to a high degree of variability.

To allow the necessary examination, this first chapter takes a 'higher level' look at tactics and lesson learning. It sets out the background organisational and intellectual context of the army in the period alongside key ideas drawn from modern studies of organisational learning. The second chapter considers how the army thought about tactics and doctrine before and during the war, and what was in place to capture and analyse 'lessons learnt' at the tactical level, including the specific structures and personnel in place within the brigade. The third chapter will take a closer and more specific look

⁴ Stuart Mitchell has written regarding the First World War that '[t]he tactical level of war was the pivotal level for learning' and that this is equally applicable to the 1939–45 war. Stuart Mitchell, 'An Inter-Disciplinary Study of Learning in the 32nd Division on the Western Front, 1916-1918' p.8.

at examples from 4th Armoured Brigade, situating the concepts discussed within concrete illustrations.

An essential consideration is that warfare is an inherently chaotic activity in relation to both meanings of that word. It is confusing and tumultuous, and in the specific social sciences sense, it involves high levels of complexity and apparent unpredictability. These fundamental characteristics ensure that meaningful lesson learning, which has longer-term and wider applicability, is often difficult to extract. The environment produces a lot of noise (statistical data, intelligence, anecdote, rumour) but the signal (reliable, actionable knowledge) is often hard to interpret or even discern. Gathering accurate information and guaranteeing that any lessons it identifies are genuinely valid and appropriate is a conundrum that has challenged armies for centuries and continues to do so.5 Helpfully, however, in a few key areas, there is a good degree of consensus around specific concepts. In terms of the actual means by which armies and their component sub-organisations convert experience into active changes in their methods, three main routes emerge from the literature. These are adaption, innovation and emulation. At its simplest, in adaption, existing methods are modified as a result of learning, in innovation, entirely new methods are created, and in emulation, another unit's or formation's methods, including those of the enemy, are simply copied. These three routes can be carried out via training, written advice, SOPs and informal practices, but crucially they all lead to the modification of the previous methods. This is seldom a simple or linear process, but nonetheless, it forms the basic architecture that underpins tactical modification and lesson learning. These allow new or revised knowledge to be converted into new or revised practices, improving existing skills or developing new ones.

⁵ See, for instance, Sergio Catignani, 'Coping with Knowledge: Organizational Learning in the British Army?' *Journal of Strategic Studies*, (2014) 37:1, 30-64.

⁶ Refer to Catignani, ibid, Max Visser, 'Teaching giants to learn: lessons from army learning in World War II' in *The Learning Organization*, Vol. 24 (2017) Issue: 3, pp.159-168, Eric Heginbotham, 'The British and American Armies in World War II: Explaining Variations in Organizational Learning Patterns' (1996) Working paper 96-2, MIT. United States.

So how does this work in practice? When considering how knowledge is both gathered and distributed by armies, Tom Dyson characterises overall military learning as conforming to two principal types:

First, informal learning processes, where lessons are disseminated through informal social networks. They ... focus on short-term, ad-hoc problem solving and seldom result in advanced adaptation or innovation ... Second, formal lessons-learned, which involve creating institutional structures and processes to identify, manage, evaluate and implement the lessons of operations for key areas of military activity.⁷

Dyson has written extensively about how armies learn lessons and was instrumental in the overhauling of the current British Army's approach to this.⁸ The models he proposes seem entirely workable for the Second World War era, and this chapter will demonstrate processes occurring in 1943–45 that conform precisely to Dyson's position. Consequently, it is clear that both the informal networks within and across units and the formal military structure can undertake 'learning' from experience and that this transmits tactical change through the three principal routes of adaption, emulation or innovation. Critically, however, all learning takes place within a cultural and organisational context. It is important therefore to establish how doctrine, tactical methods and lesson-learning processes were understood and carried out in the British Army and subsequently how this was undertaken in 4th Armoured Brigade. This will begin with an overview of doctrine.

⁷ Tom Dyson, 'The Military as a Learning Organisation: Establishing the Fundamentals of Best-practice in Lessons-learned' in *Defence Studies*, Vol.19, (2019) No.2.

⁸ https://pure.royalholloway.ac.uk/portal/en/persons/tom-dyson(ad8e5533-fbc1-43b0-984a-d66d54900ded).html.

Doctrine: Institutional Thinking?

Doctrine occupies a critical role within armies. It shapes the way they choose to fight, influencing their organisation and tactics. It gives soldiers a toolkit with which to tackle frequently encountered tactical or operational problems and, most importantly, it provides a common approach that is shared across an army, allowing greater intra-organisational cooperation. It is, at its core, the philosophy of an army, providing the conceptual basis of all of its operations. One of doctrine's central functions lies in allowing commanders to negotiate complexity and unpredictability but always as a form of guidance rather than a system of rigid rules.

Formal military doctrine became increasingly important to both the French and the German Armies in the final years of the nineteenth century and remained so throughout the First World War.⁹ This was a result of the increasing complexity of warfare, its larger scale and the appearance of huge conscript armies.¹⁰ However, whilst certainly not eschewing the idea of doctrine entirely, the British exhibited a tendency to view formal military doctrine as constricting and 'un-British',¹¹ the result of a combination of cultural and structural influences, as both David French¹² and Aimee Fox¹³ have convincingly argued. This is borne out in training and 'lessons learnt' materials viewed during the research of this thesis.¹⁴ British doctrine was relatively loose in its construction and deliberately designed for wide-ranging interpretation on the assumption, deeply embedded in the organisational culture, that well-trained middle- and senior-ranking officers of the 'right sort' would always work out

⁹ Robert Citino, *Quest for Decisive Victory: From Stalemate to Blitzkrieg in Europe, 1899-1940* (Lawrence: University of Kansas Press, 2002) pp. 132-41 and 147-49.

¹⁰ Williamson Murray, War, Strategy and Military Effectiveness (Cambridge: CUP, 2011) Chapter 8.

¹¹ French p.20-22.

¹² French, ibid.

¹³ Aimee Fox, *Learning to Fight*, Chapter 1.

¹⁴ A good example can be found in this. Early in 1942, Lieutenant General William Gott delivered a lecture to officers from across 13 Corps which he had recently taken command of; the lecture focused on the role of 7th Armoured Division in the fighting of November and December 1941 whilst Gott had been its GOC, 7th Armod Div Ops Nov-Dec 1941 Lecture by Gott in WO 201/516, TNA, Kew. The lecture runs to 14 A4 pages yet it is mostly a narrative account of the operations; the sum total of lessons highlighted cover just over one page, and are, whilst valid, mostly prosaic with little real analysis. It shows minimal actual insight and no attempt to engage with doctrine.

what needed to be done.¹⁵ General principles were favoured over specific examples or directions. This ethos was not necessarily a failing on the army's part; it created both organisational strengths and weaknesses.¹⁶ This is notable when reading the contemporary accounts of the degree of flexibility and adaptability shown by 4th Armoured Brigade at the tactical and operational levels throughout the Sangro fighting.¹⁷ The foul weather and the enemy caused plans to be altered at short notice repeatedly. The overall plan was never de-railed by this. Improvisation at all levels was embraced and generally effective. This extract from *Field Service Regulations* (1935) gives a good indication of how this ethos was expressed when it came to 'rules':

it must be clearly understood that the principles that guide action in war, whether strategical or tactical, are not laws ... where the observance of certain conditions produces an inevitable result, nor rules ... the breach of which entails a definite fixed penalty: they simply indicate a course of action that has been successful in the past and serve as a warning ... Many plans have, however, succeeded in war, although not made in accordance with text-book principles.¹⁸

By the outbreak of the Second World War, British doctrine for the army was embodied in four principal documents: Field Service Regulations (FSR), Army Training Memoranda (ATMs), Army Training Instructions (ATIs) and Army Training Pamphlets (ATPs). FSR was a large volume (in three parts) giving an overview of doctrine at all levels, whilst ATMs, ATIs and ATPs were series of slim booklets concentrating on specific areas, typically at a tactical level. The latter three were all aimed at directly supporting training. All of these were intended to be updated with new versions when the situation dictated. By contrast, German doctrine was expressed in a single volume, *Truppenführung*, first produced in 1933 though updated later. ¹⁹ Germany's army possessed a coherent and well-

¹⁵ French, p.279-80.

¹⁶ Colvin, *Eighth Army*, p.81 and Fennell, *People's War*, 218-20. Chiefly, flexibility and skill at improvisation.

¹⁷ '4th Armoured Brigade in Italy' in WO 169/8861 and 'Capture of German Positions on the Sangro' (5 Corps) WO 204 / 8159, TNA, Kew. The river was in flood and there was frequent rainfall and snow.

¹⁸ FSR 1935 Volume III p.6.

¹⁹ The Heer certainly produced other training materials similar to ATPs and ATMs but they were specific and narrow in focus; doctrine was confined to *Truppenführung*. See Matthias Strohn, *The German Army and the Defence of the Reich* (Cambridge: CUP, 2011), Chapter 8. Condell and Zabecki assert that *Truppenführung*

understood doctrine which was central to its tactical training and fighting methods and was largely contained within *Truppenführung*, a document which has been called 'one of the most significant pieces of doctrinal writing in military history'.²⁰ Interestingly, despite huge differences in content, structure and tone, *Truppenführung* also advises readers that 'war is an art, a free and creative activity'²¹ and 'lessons in the conduct of war cannot be exhaustively compiled in the form of regulations',²² indicating a not at all dissimilar starting position to British doctrine. Thereafter there were significant differences, as British doctrine retained an emphasis on top-down control as a means of off-setting the inevitable friction of battle; NCOs and junior officers were expected to stay within quite tight parameters set by more senior leaders. Whilst this can sometimes be exaggerated (there are plentiful examples of junior leaders being encouraged to use their initiative and doing so),²³ it is clear that, as discussed at length in the last chapter, the German armed forces gave NCOs a greater degree of responsibility and this increased tactical flexibility and dynamism.

The German Army was not a monolithic, cohesive whole and the additional texture and detail arising from who the brigade was fighting can be instructive. Although the German ground forces were certainly more centralised and standardised than the British, they were, as many post-war studies have rightly argued, substantially less centralised and standardised than either US or Soviet forces.²⁴ A consequence of this is that, rather like the British, it is very hard to make generalisations or to compare supposed like with like, a fact often obscured by the Germans' relative doctrinal uniformity.²⁵ This important granularity is frequently missing from studies.²⁶ In Italy, *65. Infanterie*-

was what would now be called a capstone document, Bruce Condell and David Zabecki, (eds) *On the German Art of War: Truppenführung* (Mechanicsburg PA: Stackpole, 2009), p.10.

²⁰ Mungo Melvin, *The German Perspective* in *The Normandy Campaign* 1944, p.22.

²¹ Bruce Condell, and David Zabecki, (eds) On the German Art of War: Truppenführung, p.17.

²² Condell, Ibid.

²³ See, for instance, 2 KRRC at Tréprel and Pierrepont in Normandy discussed earlier in this work and the 3rd Carabineers at Nunshigum (Burma) mentioned later in this chapter.

²⁴ Niklas Zetterling, *Normandy 1944* (Oxford: Casemate, 2019) p.84-88 and Omar Bartov, *Hitler's Army* (Oxford: OUP, 1992) p.36-40 and p.102-105.

²⁵ Different in terms of equipment, organisational structure and organisational culture.

²⁶ For example, Richard Doherty, in *Eighth Army in Italy*, whilst clear on which German formations were involved at any point gives very little detail on their organisation or background. Max Hastings, *Overlord*, similarly, is clear on the formations involved and does make use of German documents; he makes a strong

Division, which was assessed as being 'raw and virtually untried in battle ... [its] equipment was scanty and it relied wholly on horse-drawn transport'²⁷ still caused the brigade significant difficulties.²⁸ One should not ignore the Wehrmacht's unquestionable ability to mould effective units from unpromising beginnings via draconian discipline, the use of experienced veteran cadres and a morale-enhancing replacement and reinforcement system.²⁹ These factors were acknowledged somewhat tacitly in 38th Infantry Brigade's intelligence summary from November 10th, 1943.³⁰ This states that some 'officers and NCOs have fought in Russia'³¹ but also claims that most of the younger soldiers are 'mainly Yugoslav and Poles'.³² The advantages of topography and unit-level firepower were also critical on the Sangro, and indeed elsewhere. The Germans, as defenders, had chosen to fall back behind the wide and deep river Sangro, a significant obstacle, and occupy high ground. Moreover, several German weapon systems and the way they were organised within units (reflecting their doctrine) delivered a number of clear tactical advantages, certainly in comparison to British units. This will be discussed in more detail later in the chapter.

The role of doctrine in shaping German tactical methods will be returned to as part of its oppositional relationship with those of the British, but it is important here to give some explanation of how doctrine was 'trained in' and converted into tactical practices. Across the British and German armies, certain policies and approaches are worth highlighting because of their specific bearing on how tactics and the underpinning doctrine were both understood and taught. With both armies, it is of course worth remembering that not everyone read doctrine, much of it was not aimed at everyone

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distinction between the Heer and Waffen-SS, but other than this, both groups appear somewhat generic with minimal specificality.

²⁷ Phillips, *The Official History of New Zealand in the Second World War* Volume 1. (1957) p.67. Drawn from the 2nd New Zealand Division's own intelligence reports.

²⁸ Although reinforced by limited elements of *26. Panzer-Division*. Mainly SP guns and infantry. German (OKW) Situation Maps, *Lage Südwest*, Nov-Dec. 1943, Private purchase of PDFs.

²⁹ For discussion of this see French, *Churchill's Army* pp. 9-10,153, Hart, *Colossal Cracks* p.26, Peter Lieb, *Konventioneller Krieg oder NS-Weltanschauungskrieg?* (Munich: Oldenbourg, 2007) p.422.
³⁰ WO 169/8929, TNA, Kew.

^{31 38} Brigade Intelligence Summary, dated 10/11/1943 in WO 169/8929, TNA, Kew.

³² WO 169/8929, ibid. More likely *Volksdeutsche* from those countries who were being conscripted in increasing numbers at this point. Link to an article discussing one Polish individual's conscription, https://warfarehistorynetwork.com/article/saga-of-a-volksdeutscher-german-pole-goes-to-war/ [Retrieved February 9th 2023].

anyway (most British material was intended for officers and NCOs with, in many cases, an emphasis on the former) and some soldiers simply didn't engage with it even when it was aimed at them.³³

This is of major importance to this study's examination of fighting effectiveness, because, in terms of the understanding, teaching and practice of tactics, two influential modern studies³⁴ have argued convincingly that the British Army of the Second World War suffered from a lack of 'coherent and effective tactical doctrine'³⁵ and, moreover, that what doctrine there was often faced dilution through poorly organised training.³⁶ Despite these significant flaws,³⁷ it is also essential to note that there is strong evidence that 'the British Army had identified the key intellectual and doctrinal aspects of the coming war well before 1939, as Jonathan Fennell has recently asserted.³⁸ The army was firmly wedded to motorisation and mobility and, in theory at least, all-arms cooperation at the war's outbreak.³⁹ However, it must also be remembered that the British Army remained a highly heterogeneous organisation with differing approaches to doctrine existing within it and divergent opinions on the best uses of its component arms (especially armour), and this pertained to an extent not seen in the other major armies of 1939–45. Certainly, this is one of the factors that ensured it struggled to synthesise these key elements into workable doctrine and unit- and formation-level

³³ Michael Carver felt that whilst young officers in the late 1930s discussed doctrine and new ideas a great deal, their actual reading was often very limited. Michael Carver, oral history interview, IWM, 877, Reels 1 and 3. See also Lt. Belsey's letter home describing the large amount of doctrinal material he was supposed to read but felt 'somehow I don't think I shall' in December 1943, Quoted in Place, p.16 from original letter in the collection of the IWM.

³⁴ David French, *Raising Churchill's Army* and Timothy Place, *Military Training in the British Army*. Both continue to be cited extensively in the literature two decades after publication. Google Scholar (April 2022) records 275 citations for French's book in published works, Place has a more modest 23 but continues to be regarded as a key text on the area.

³⁵ Place, *Military Training* p.168.

³⁶ Williamson Murray, *The Culture of the British Army 1914-1945* p.200-203 in *The Culture of Military Organizations* eds. Mansoor and Murray, (Cambridge: CUP, 2019).

³⁷ It is important to remember the immense challenges posed by the creation of a massive force of citizen soldiers and the influence this had on training and doctrine, see Allport, pp.45-6, 62 and Fennell, *People's War.* p.63-4.

³⁸ Jonathan Fennell, *Fighting the People's War* p.32.

³⁹ Fennell, *People's War* p.32-33 and Forrester p.21-22.

practices, a fact highlighted by the military disasters of 1940–42 and indeed acknowledged by the army itself.⁴⁰

Documents discussing these failings are plentiful; Lessons from Operations in Cyrenaica. 41 a report produced in December 1941 by Eighth Army HQ (whose command 4th Armoured Brigade⁴² was under at the time) spends considerable space assessing the causes of what is grudgingly acknowledged to be poor performance in North Africa earlier in the year. The same types of acknowledgements were made in numerous dissections of the BEF's ill-starred time on the continent a little earlier in the war. 43 Attempts to understand what went wrong in France and the Low Countries culminated in the Report of the Bartholomew Committee,44 which took large amounts of both written and oral evidence. Overall, a huge volume of material was produced examining the conduct of the war at all levels during this phase by both army officers and War Office officials. Whilst these commentaries highlighted a range of failings, some perceived, others well documented, and all given different weights by different observers, certain areas were noticeably of widespread concern across the analyses produced between 1940 and 1942. Those rooted in the tactical and lower operational levels, and thus absolutely germane to fighting effectiveness at formation and unit level, were inter-arm cooperation, training (in terms of both specific skills and tactical methods), the physical fitness of individual soldiers and overall troop morale. These were all labelled as deficient. In terms of equipment, in particular, wireless communications and anti-tank

⁴⁰ French, Churchill's Army, 189-96.

⁴¹ WO 201/450 and CAB 106/220 TNA, Kew.

⁴² Indeed, the brigade's own report of the fighting at Beda Fomm is highly critical even though this was a rare victory! 'Events Immediately Following Sidi Barrani', report by Col. H.L. Birks, 4th Armoured Brigade Papers, Tank Museum, Bovington.

⁴³ For instance, in a report submitted by an ambitious divisional commander (a still relatively unknown Bernard Montgomery), 'Important Lessons from the Operations of the BEF in France and Belgium', Bernard Montgomery, contained within WO 106/1775 TNA, Kew.

⁴⁴ WO 106/1775, TNA, Kew.

weapons were found wanting.⁴⁵ Questions had also begun to be asked about the quality and suitability of British tank designs, although criticism here did not peak until later.⁴⁶

These areas of difficulty arose from a range of organisational and environmental factors. Some were geopolitical and strategic and others were rooted in the culture of the pre-war army.

Additionally, the technologies available to the army were further influenced by the complicated interplay of economics, doctrine and organisational culture. The army had confronted both structural and technological difficulties in the 1930s. These included the increasing use of motor transport and the phasing out of horses, and the growing importance of, and troop numbers required by, tank and anti-aircraft units. All of these created tensions within a 'tribal' organisation and exerted powerful, sometimes conflicting, influences on ideas about how the next war might be fought. The army's fraught relationship with doctrine, and an understanding of what this meant in practice, is essential to grasp the arguments this thesis sets out about lesson learning and tactical methods, because that relationship shaped attitudes, approaches and processes. Doctrine, in theory at least, fashioned the army's approach to tactics, and this area now comes into focus.

Tactics and Tactical Training

Doctrine and experience (both operational and exercise-based) should combine to create tactics.

Contemporary accounts that describe weaknesses in the linking of doctrine, tactics and training are important for this study because they illustrate points at which existing doctrine and tactics might be identified as needing revision or wholesale replacement. Following the conclusion of operations in

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⁴⁵ French, *Churchill's Army*, Chapters 6 and 7 and Fennell, *People's War*, p.220-27. These also tie in closely to the Bartholomew Committee's specific findings summarised in CAB 106/220 TNA, Kew.

⁴⁶ For an overview see John Buckley, *British Armour in the Normandy Campaign 1944* (2004) Cass, Abingdon, Chapter 6.

⁴⁷ A large and complex area but given a good summary in David Fraser, *And We Shall Shock Them*, Chapter 1 and Jonathan Fennell, *Fighting the People's War* Chapters 1 and 2.

⁴⁸ Alan Allport, *Browned Off and Bloody-Minded*, p.26-28.

⁴⁹ Barry Posen, *The Sources of Military Doctrine* (London: Cornell University Press, 1984) Chapter 5.

Tunisia, a 'lessons learnt' report was produced by First Army HQ.⁵⁰ One of the areas that needed addressing according to this was tactical-level command (and this applied across all fighting arms), especially in offensive operations: 'we are still weak in junior leading ... success was lost or acquired too expensively through bad tactical handling on the part of young officers or NCOs'.⁵¹ When the Germans inevitably counter-attacked, as their doctrine and training dictated, the British were sometimes unprepared. 'This view is also held by senior captured German officers who are of the opinion that German junior leaders are better than ours, especially in the use of ground.'⁵² This needs to be seen in the context of an army that had been at war for almost four years at this point but which was still identifying similar weaknesses to those it had two or three years earlier.

First Army's report highlights the role of training and states unambiguously that this must improve to address the identified failings. This was of course famously an area that Montgomery tackled vigorously upon taking over Eighth Army.⁵³ Training, in theory, ensured that doctrine, specific tactical practices and the skills that supported these, were understood and mastered at all levels, but only when that training was appropriately structured and resourced. Training on tactical methods centred on the rehearsal of drills and on field exercises, although for officers it could also include TEWTs (Tactical Exercises Without Troops) or tactical problem-solving discussions. Earlier in the war, both of these main areas suffered from deficiencies which have subsequently been identified.⁵⁴ Good training can 'stress test' responses and help to ingrain learning, but much of that regarding tactical methods conducted throughout the British Army prior to and during the early years of the war has been shown to be inadequate.⁵⁵ The issues identified were a lack of time for training and difficulty in obtaining suitable space for some types of training (that involving tanks in particular). Also, there was a lack of realism in field exercises, that is, in both the scenarios trained for and the

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⁵⁰ 'Lessons from the Operations of 1st Army, North Africa 1942-43' WO 106/2728 TNA, Kew.

⁵¹ WO 106/2728 p.2.

⁵² Ibid.

⁵³ Bernard Montgomery, *The Memoirs of Field Marshal Montgomery* (Barnsley: Pen and Sword, 2007), Chapter 7.

⁵⁴ Place, *Military Training*, Chapter 3, also Fennell, *People's War*, p.37-39.

⁵⁵ Place and Fennell, ibid.

actual conduct of exercises. Finally and perhaps most tellingly, an absence of specific engagement with doctrine throughout was identified.⁵⁶ Michael Carver (RTR) recalled his initial tactical training at Bovington in 1935 and the exercises he took part in between 1936 and 1940 with his regiment as poorly organised and unrealistic and where 'not enough attention was paid to the basic elements of soldiering'.⁵⁷ He contrasted this with the technical skills courses he attended in driving, gunnery and vehicle maintenance, all of which he felt were excellent.

It is significant that even during the Spring of 1944 when 4th Armoured Brigade was in the UK preparing for the invasion of France, training was often constrained by factors which would have reduced its efficacy. For 2 KRRC, range work appears to have made up a significant part of this training; however, some of the allocations of ammunition for the activity appear to have been paltry, for instance, the orders for platoon training in late April specify just 6 rounds per rifle and 10 per Bren for the range stage of the training.⁵⁸ Even blank ammunition for field exercises appears to have been in relatively short supply; one set of orders requires the Bren gunners to carry a tin full of stones to simulate automatic fire!⁵⁹ There is a startling contrast with a training exercise undertaken by the battalion in mid-February 1945 where 300 thunder-flashes were to be used as well as over 1,000 rounds of blank and scores of smoke grenades.⁶⁰ Progress had obviously been made. A more glaring problem in 1944 was the lack of joint training with the armoured regiments of the brigade. Providing direct support to the tanks was the motor battalion's *raison d'être*, and whilst 2 KRRC had obviously performed this function many times previously, the need for constant practice should have been obvious. This had increased importance at this point because both 2 KRRC and the armoured regiments had received considerable amounts of new equipment,⁶¹ and of course every part of the

⁵⁶ Jim Storr, an academic and former army officer, argues that training exercises must be 'two-sided, adversarial and in real time' to deliver effective tactical learning. Fight Club Webinar 08/09/2022.

⁵⁷ Michael Carver, interview, IWM, 877, Reels 1 and 3 (1977).

⁵⁸ WO171/1327, Orders for Platoon training days, April 19-21, 1944, TNA, Kew.

⁵⁹ Similar trifling allocations of both live and blank ammunition can be seen in the war diary of 214 Infantry Brigade in February 1944, WO 171/708, TNA, Kew.

⁶⁰ 'Battalion Exercise, 16th February', in WO 171/5212, TNA, Kew.

⁶¹ All three regiments now had Shermans and one per troop was a Firefly variant. 2 KRRC had received new half-tracks.

brigade had received some 'green' reinforcements whilst in the UK. In addition, in one of the two larger-scale exercises undertaken by the battalion with the armoured regiments, most of 2 KRRC were 'playing enemy' and thus not performing in their normal role, with only a single company functioning as support to the tanks.⁶² It is possible that the somewhat lacklustre training of the brigade during the first part of its time in the UK reflects, in part, the presence of the 'caretaker' brigadier (Hugh Cracroft), who was new to both the rank and the formation, but certainly there were wider and more systemic problems.

Timothy Place, who critically examined the records of British Army training in the period between 1940 and 1944, argued persuasively that, 'doctrine was in many cases wrong ... [but] ... right or wrong, troops in training frequently ignored it'.⁶³ Whilst German training and doctrine will be considered later, it is worth remarking briefly how the connection between the two was more firmly and systematically established in the Heer, the Waffen-SS and Luftwaffe ground forces and that realism in training was generally better embedded.⁶⁴ One example gives a clear illustration: the war diary of 9. SS-*Panzerdivision*,⁶⁵ which the brigade encountered in both Normandy and the Netherlands, contains far more material on training than those of any of the equivalent British formations examined for this study. Furthermore, the emphasis on core tactical skills, especially for NCOs and junior officers, linked specifically to existing doctrine, is clear.⁶⁶ There is insufficient space here to explore the debate around the concept of *Auftragstaktik* (generally translated as 'mission tactics'), but this had a profound effect on the way German units operated.⁶⁷

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⁶² WO171/1327, May. Appendix re training exercise.

⁶³ Place, p.108.

⁶⁴ Jorit Wintjes, *German Army Culture*, 1871-1945 p.118-19 in *The Culture of Military Organizations* ed. Mansoor and Murray, Jörg Muth, *Command Culture* p.164-67 and Phillip Blood, *Birds of Prey* (Stuttgart: Ibidem Verlag, 2021) p.255-60.

⁶⁵ War Diary of 9. SS-Panzer-division 1943-44 T354, Roll 147, NARA, US.

⁶⁶ See, for instance, the major training undertaken whilst reorganising in Holland following the division's withdrawal from France; see entries September 4th-14th, T354, Roll 147, NARA, US.

⁶⁷ Martin van Creveld, *Fighting Power* (1982) p.36-37, Strohn, *Defence of the Reich*, pp. 114,196 and Blood, ibid, pp.259-60, 333-34 for a range of views.

In the British Army, battle drill, a system of training and tactical responses, which was a form of basic doctrinal reinforcement, became increasingly influential from early in 1941. This was initially aimed principally at infantry but elements found their way into armoured training quite quickly. Battle drills condensed fieldcraft and minor tactics into simplified, set drills which were practised repetitiously but in relatively realistic circumstances. Its architects specified that it would combine fieldcraft ... battle discipline and battle inoculation and would serve to create the aggressive spirit ... bring out ... qualities of leadership and reduce the shock effects of battle noise. Place argues compellingly that the method improved both basic tactical skills and morale. General Head Quarters Middle East (GHQ ME), under whose overall command the brigade was for a long period and which contained a number of officers who went on to prominent roles in 21st Army Group, expressed enthusiasm for battle drill in November 1942:

Every unit of every arm must develop a battle drill suitable to its own special needs ... Battle drill will thus be one of the chief means by which control and speed of action can be obtained ... [these are] two of the most important factors in modern war.⁷²

There was criticism of battle drill and enthusiasm for it was not universal. Some officers felt it would 'sap initiative ... and ... tactical flair', 73 criticisms rooted in much the same mindset as the uneasy relationship with doctrine. Nonetheless, battle drill improved training in minor tactics where it was taken up. At the end of the Italian campaign, the brigade's own report showed enthusiasm for the battle drill approach and identified that a 'well thought out battle drill for first contact' in close country

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⁶⁸ French, p.205-6.

⁶⁹ The Instructor's Handbook on Fieldcraft and Battle Drill (London: War Office, 1942). p. 3. This was written by Lieutenant Colonel Lionel Wigram and Major R. M. T. Kerr. Wigram's observations on the British Army appear a number of times in this thesis, and he was an influential figure.

⁷⁰ Instructor's Handbook, p.2.

⁷¹ Place, p.52-63.

⁷² 'GHQ ME Tactical Discussion on New Model Inf and Armd Divs' (November 1942), Opening Remarks, Papers of Royal Scots Greys, RSDG Museum, Edinburgh.

was required.⁷⁴ This illustrates how specific experiences fed into localised lesson learning; whilst unsurprising, this had wider implications for the army.

The situation with doctrine and tactical methods was further complicated by the circumstances early in the war. It will be seen that these circumstances are particularly relevant to 4th Armoured Brigade. After the summer of 1940, Britain remained involved in land combat operations on a relatively small scale until into 1943,⁷⁵ and those remaining operations took place in distant theatres with limited contact with either the UK or each other. Early successes against the Italian Army in North Africa in 1940 and 1941 provided lessons with little wider applicability.⁷⁶ Despite their huge numerical advantage, the Italian forces in Libya were weak in terms of armour and anti-tank weapons and were not expecting bold offensive action from their opponents. British and Commonwealth armour was frequently able to operate effectively well ahead of or even without infantry support, and reports from North Africa failed to contextualise this sufficiently, allowing the poor practices to continue until the arrival of German mechanised forces put an abrupt and costly end to them.⁷⁷ Inevitably, formations, corps and armies modified existing doctrine on the basis of local circumstances and new experiences.

The enormous impact of climate and terrain on this process will be returned to, but suffice to say, this was important and a key component of the many variables that drove change to tactical methods. The flexible and non-prescriptive nature of much of British doctrine actively encouraged this, creating what was in effect 'local doctrine'. 4th Armoured Brigade was formed in North Africa and served throughout the campaign there, whilst its constituent units went through many changes; they had all been part of Eighth Army. The differences between the 'Desert Army' and the one still in

⁷⁴ '4th Armoured Brigade in Italy' p.6. Papers of Royal Scots Greys, RSDG Museum, Edinburgh.

⁷⁵ Numbers deployed overseas increased with the arrival of 1st Army in North Africa and the formation of 14th Army in the Far East but still remained modest until June 1944.

⁷⁶ Forrester p.35 and Place p.132-35.

⁷⁷ Ibid.

the UK have been extensively discussed in the post-war literature. 78 The contrast between the tactical methods that developed in combat in North Africa and those developed in training and exercises in Great Britain was often very marked.⁷⁹ Attempts to address this issue were certainly made, leading to efforts to circulate information as widely as possible within theatres and to the entire army. One example here is the December 1941 report Lessons from Operations⁸⁰ produced by Eighth Army which was copied to more than thirty organisations and individuals, mostly in the Mediterranean Theatre but also some in the UK and India. Stop-gap methods put in place to help circulate 'lessons learnt' in North Africa culminated in a series of booklets, Current Reports from Overseas and Notes from Theatres of War, published by the army from 1942 onwards. These sought to disseminate best practice identified on operations, but the delays created by the necessity of compiling data and writing, printing and then distributing the booklets to widely dispersed forces (all of course unavoidable) meant that information was often out of date on arrival.81 New information often didn't keep pace with printing capacity, and it appears that revisions, where they occurred, could be given verbally during training courses or passed on informally within units. Many of the MTPs and ATPs seen for this study have extensive handwritten notes on them or even sections crossed out.

This chapter has shown that successfully learning from combat operations can occur via adaption, emulation or innovation and that modifying tactical methods to overcome problems or improve performance is a critically important skill for all military units and formations. Key to delivering this is the willingness to identify lessons learned from operations and distil these into training, new tactical procedures and unit/formation reorganisation to enhance fighting effectiveness.

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⁷⁸ French in *Churchill's Army*, Place in *Military Training* and Fennel in *People's War* explore the differences in practices and doctrinal variations that emerged in North Africa.

⁷⁹ Place, pp. 63-4, 95-6 and French, *Churchill's Army*, p.279-80.

⁸⁰ WO 201/450 TNA. Kew.

⁸¹ Place, pp.13-16.

Assessing the effectiveness of the learning undertaken and the creation of new tactics is not a simple process, and the absence of formal systems and metrics at the time further complicates this. However, some models used by the present-day British Army offer a useful approach. The next chapter will apply the model the army developed in conjunction with Dr Tom Dyson to the processes that can be seen in material from 1943 to 1945.

Chapter 2. Organisational Learning and 'Lessons'

In this chapter, the processes of lesson learning and the factors that influenced and drove these will be compared and contrasted with the CARE (Capture, Analyse, Resolve, Exploit) model currently in use in the British Army as a template for effective organisational learning. This was developed in the early 21st century and incorporates key ideas from academic and military studies of organisational learning which align with those set out in the last chapter. It provides a credible model of best practice and presents a clear description of how lessons can be transmitted from the frontline to higher commands and the training establishments, and then ultimately back to frontline units again as new tactical methods.

Organisational Learning

The diagram below illustrates the central elements used in this chapter and gives a representation of their interconnected nature showing how the CARE model helps to examine these.

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¹ Researcher's interview with Lt. Col. Tony Gawthorpe of the British Army's Lessons Exploitation Centre, April 2021.

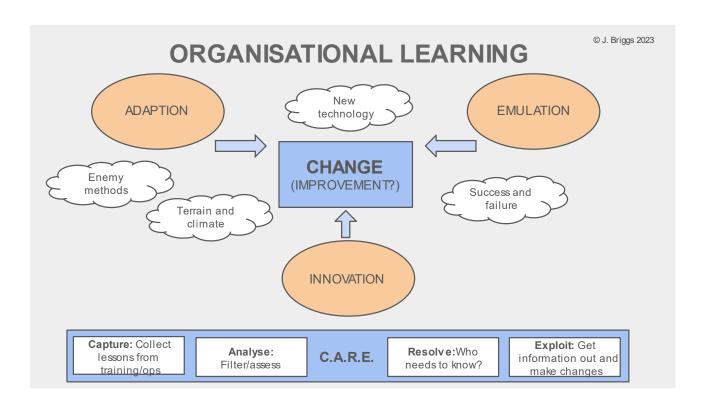


Figure 3: Organisational learning influences and the CARE model

This is of course ahistorical; the model did not exist in the 1940s and, as already suggested, thinking about organisational learning within the British Army was considerably less mature in the era. Nonetheless, as with the discussion of leadership, modern frameworks and concepts can provide an invaluable tool to explore what was done in the past and give expression to ideas and processes in action that were not always articulated in a clear way at the time; organisational learning is an area where this is particularly the case. It is also, critically, a method to explore what was *not* done and to highlight what appear now to be gaps in processes. The Directorate of Tactical Investigation was established in 1943 to address tactical lessons learnt across the army. It was not the only War Office body working in the area of learning; there were also the Directorate of Military Operations (DMO) and the Directorate of Military Training (DMT), both of which had some overlap with the work of the DTI. The DTI was to collect and assess post-action reports so that wider, tactical lessons could be drawn. A DTI report expressed the rationale very clearly:

In the absence of ... [the] ... collation and examination of evidence ... the facts of battle ... remain diffused throughout the army as a kind of undefined, individual 'craftsman skill'. Much of it is lost when individuals leave the army. The remainder is handed down, often distorted.²

Whilst a positive step, its impact was limited until fairly late in the war,³ and despite this, David French maintains that there was still a lack of 'a single guiding executive' to oversee the vital interface of tactics, lesson learning and doctrine. Of course, well within living memory, the army had confronted similar problems.

Aimee Fox has shown convincingly, in what is currently the most detailed study of the area, that the British Army during the First World War developed effective methods for identifying and disseminating tactical and operational learning and that 'this was more complex than previous historians have allowed'. It was also 'far from even'. Learning was not always effectively identified, and individual formations and corps could and did work differently. However, despite this uneven nature, systems were developed that were generally effective. As *Learning to Fight* demonstrates conclusively, tactical and operational lessons *were* captured and successfully passed on via training and through official and semi-official literature. This capability atrophied to a large extent in the inter-war years, a product of greatly reduced budgets and the loss of organisational memory via personnel churn. The result of this was wholesale reinvention two decades later.

It is important to understand that although the DTI was given significant resources and embarked on a vigorous campaign of data collection from its inception early in 1943, the best ways to make

² 'Battle Studies', May 1945, p.1. Report in WO 231/1 (Various DTI Papers), TNA, Kew.

³ French, p.280.

⁴ Fox, Learning to Fight p.240.

⁵ Fox. ibid.

⁶ At formation and corps level and via various schools.

⁷ A fact explicitly acknowledged in 'Battle Studies' p.1-2. WO 231/1, TNA, Kew.

effective use of this data were not always clear and were plainly subject to considerable trial and error. Questions to be asked in the DTI questionnaires issued to officers were not properly standardised until February 1944.8 This was, in part at least,9 because of the huge range of stakeholders (in terms of arms of service, theatres and various War Office departments) and the corresponding complexity in terms of technical, tactical and logistical issues that needed to be considered. In addition, different formations provided differing levels of data to the DTI, as will be seen shortly. Thus, thinking about organisational learning was still comparatively unsophisticated. Despite this, vast intellectual effort was most certainly put, at least in some parts of the army, into learning lessons and updating and modifying tactical procedures as a result of operational successes and failures, enemy tactics and the arrival of new equipment. This chapter now considers how these activities, which were frequently improvised, or when they were not, at least rather basically structured and conceived, played out within 4th Armoured Brigade and the effect they had on the brigade's ability to generate and deliver fighting effectiveness.

Key Variables

Learning, even at the formation and unit levels, encompassed a wide range of subjects, from the tactical through the logistical and into areas such as administration and mechanical maintenance. However, as already mentioned, the focus here is on specific tactical learning, which had a clear and discernible effect on combat performance. As this thesis demonstrates, the fighting effectiveness of formations and units was shaped by an extensive range of situational and organisational influences. Even within these, both short- and long-term processes were involved

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⁸ WO/232/7 'Particulars Required by War Office Directorates from Officers Returned from Theatres of War' (1944) TNA, Kew.

⁹ Other issues involved included the time it took to gather, assess and disseminate information, a painfully slow process given the widely dispersed theatres but also debates about whom information should be shared with and about research methodologies. See Robert Engen, *Canadians Under Fire* (Montreal: McGill-Queens University Press, 2009), Chapters 2 and 3.

¹⁰ WO/232/7 ibid.

¹¹ An issue discussed extensively and throughout Charles Forrester's thesis, 'Montgomery and his Legions' but also throughout Timothy Place, *Military Training in the British Army, 1940-1944.*

and variable levels of complexity. Some problems were simpler than others. Changes in existing circumstances, or the emergence of new influences, shaped the threats and opportunities that formations confronted, and this was unquestionably an area for lesson learning. Two factors emerge as being particularly influential, and this is reflected in the amount of organisational learning derived from and directed at them; these are topography and the enemy. Whilst this might seem glaringly obvious in any study of warfare, it is surprising that large swathes of the existing historiography fail to address either area adequately.

The wide range of terrain, climate and vegetation encountered by 4th Armoured Brigade during the period between 1943 and 1945 is shown in what follows to have had a variety of differing impacts. These affected the way the brigade and enemy forces operated, and, as noted, much of the literature lacks an appropriate focus on this. ¹³ Visibility and mobility were critical factors at the tactical level, and terrain and vegetation drove these. ¹⁴ Long-range direct-fire weapons could lose their advantages in woodland or very undulating country. ¹⁵ Even indirect fire was more difficult to coordinate in such terrain. Mud or snow could greatly limit the range and speed of vehicles. Dust could make movement visible at long ranges. ¹⁶ In close country, all but the largest pieces of equipment could often be camouflaged fairly effectively, but in flat, open terrain the reverse was true. This in fact received considerably more attention during the war, which makes the subsequent loss of focus on it all the more baffling. Notably, it was examined by GHQ ME in November 1942

¹² As demonstrated comprehensively in Max Visser, 'Organizational learning capability and battlefield performance: The British Army in World War II' in *International Journal of Organizational Analysis*, Vol. 24 Issue 4 pp. 573 – 590 and Neal Dando, 'The Impact of Terrain on British Operations and Doctrine in North Africa 1940-43' (unpublished PhD thesis, Plymouth University, 2014).

¹³ Dando ibid. Examples abound; see Anthony Beevor, *D-Day* (2009), which only discusses the Bocage in reference to Norman terrain and in a rather superficial way. Niall Barr, *Pendulum of War* (2004), though better, still takes a very broad brush on terrain in North Africa, except with a few specific incidents. By contrast, some recent studies have bought terrain and vegetation to the forefront such as Philip Blood's, *Birds of Prey*, via innovative mapping techniques, refer to pp. 44-58.

¹⁴ Discussed in Joel Roskin, *The Role of Terrain and Terrain Analysis on Military Operations in the Late Twentieth to Early Twenty-First Century: A Case Study of Selected IDF Battles in P. Guth, (ed) Military Geoscience: Advances in Military Geosciences, (Berlin: Springer, 2020).*

¹⁵ Roy Hubbard recalled how his support company's Vickers MMGs were of little use in the fighting in the Reichswald Forest, Reel 5, 21104, IWM Sound Archive. Ted Wood recalled the difficulties faced siting mortars in wooded areas in Normandy, interview with the researcher, May 2013.

¹⁶ Kite, p.334-45.

during a large-scale tactical discussion conference (under the direction of Brian Horrocks). Here, it was observed that the army faced issues not seen in the RN and RAF because 'the medium in which they work ... [is] ... more or less a constant'¹⁷ (one imagines this may have been robustly challenged by officers of both services!), but the paper goes on to emphasise how changes in terrain would force commanders to reappraise how they applied the general principles of warfare.¹⁸ A lengthy DTI report from 1943 concerning the balance of arms for future operations in Western Europe also stated that topography and vegetation would exert a major influence.¹⁹

Alongside terrain, the actions of the enemy were of course undeniably crucial; it is vital to remember that all of the processes discussed here were oppositional and involved a tactical and technological dialectic. The DTI *Balance of Arms* report stresses this point, stating that 'it is of high importance to appreciate the German principles of waging war'.²⁰ Many, though surprisingly not all, of the lessons learnt reports seen for this study contain a section labelled 'enemy methods'. These are of varying length and detail. Many of them demonstrate that similar tactics and dispositions were encountered throughout much of the war and in several theatres, and this gives a clear indication of the ingrained uniformity of German tactical doctrine and training. The skill and enthusiasm that these tactics were executed with varied greatly, however. A Royal Armoured Corps report for First Army on the campaign in Tunisia stated that the Germans had mainly used their tanks in small battle groups and that they only concentrated as battalions or divisions on a handful of occasions.²¹ The German policy of immediate counterattacks was also noted. 4th Armoured Brigade's report on its fighting in Italy stated, 'Tanks and SP guns cunningly sited in olive groves or other cover were extremely difficult to deal with.²² It also remarked that German tanks largely kept away from British tanks but

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¹⁷ 'GHQ ME Tactical Discussion on New Model Inf and Armd Divs' (November 1942), Papers of Royal Scots Greys, RSDG Museum, Edinburgh.

¹⁸ Each of the tactical problems wargamed as part of the conference features extensive notes about the terrain encountered and likely issues it would cause. The directing staff (DS) are encouraged in the notes to ensure that terrain causes friction to both supplies and mobility, Tactical Discussion, ibid.

¹⁹ 'The Balance of Arms' (only dated 1943 but obviously after Op HUSKY), p.3. WO 231/18, TNA, Kew.

²⁰ 'Balance of Arms', p.2.

²¹ 'First Army, RAC, Report of Campaign in North Africa' (within WO 231/10), TNA, Kew.

²² '4th Armoured Brigade in Italy', RSDG Museum, Edinburgh.

that their infantry were determined and could attack armour effectively. In Normandy, Michael Carver's *Training Memo No.2*. observed that the enemy was '[h]olding his forward posn as economically as possible'.²³ Anti-tank defences were kept well back and mostly consisted of SP guns and tanks. British attacks were usually met with '[i]mmediate local counterattacks with about 6 tanks and one or two coys of inf'. These would try to cut off tanks from their supporting infantry. He also observed more tellingly that the enemy would often counterattack repeatedly if initially unsuccessful and that these were 'seldom any better laid on than his immediate counterattacks and have proved very expensive to him'.²⁴ These last observations show that some British commanders had begun to see ways to exploit German tactics, and this will be discussed in more detail shortly. However, gathering and sifting through all of the relevant data in such complex and fast-changing circumstances was clearly difficult, and it is important to understand the approaches to this and the resources allocated.

Gathering Evidence

The first question that requires answering is who within 4th Armoured Brigade was selecting and recording the evidence for lesson learning and which individuals were providing the accounts of actions from which learning might be extracted? This is a critical first step in any lesson learning process, and understanding how this work was tasked, or indeed if it was tasked at all, helps to give clear ideas about the importance it was accorded. This forms the 'capture' element of the CARE mnemonic. As discussed, the army fully understood the need to learn from incidents and adapt to new situations but the mechanisms for doing that were limited. When investigating this, one must be aware that gathering information, assessing information and effectively reacting to new situations as a result are all separate activities that can take place independently, although any systematic organisational learning approach, as the CARE model illustrates, must interlink these. The primary

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²³ '4th Armoured Brigade Training Memo No.2.' (25th July 1944), 4th Armoured Brigade Papers, Tank Museum, Bovington.

²⁴ '4th Armoured Brigade Training Memo No.2.'

conduit for gathering initial suitable information, really the only positions with an appropriate remit, were the intelligence officers at formation and unit level. Every brigade in the British Army had a brigade intelligence officer, usually a captain, within its headquarters personnel.²⁵ Typically, these were younger but established officers who were seen as suitable for staff roles.²⁶ Each battalion/regiment also had an IO of its own and information was supposed to feed up from, and down to, these.²⁷ A period as an IO was understood to be a useful experience as part of a wider career trajectory,²⁸ principally for regular officers, although there was an element of this amongst Territorials as well.

The young, and clearly both capable and ambitious, Edwin Bramall became 2 KRRC's IO early in 1945,²⁹approximately six months after joining the battalion, having shown his abilities as a platoon commander in Normandy and Holland.³⁰ Training for staff officers, or those likely to go into these roles, was a complicated area and one which was the subject of fierce debate and frequent alteration in the inter-war period.³¹ Whilst this lies outside the remit of this thesis and is a huge subject in its own right, a few key points are important. Formal staff training was carried out at Camberley in the UK and Quetta in India before the war on a course lasting two years. Once the war started, other staff colleges were created and the course was, fairly rapidly, abbreviated to four months.³² However, at unit level, and in some roles even at formation level, most staff positions were occupied by officers who had *not* had this specialist training. These roles comprised what Carver referred to as an 'apprenticeship on the staff'.³³ Brigade intelligence officer is a good

²⁵ Kite, Stout Hearts p.255-57 and George Forty, Companion to the British Army, p.52-62.

²⁶ David French, *Military Identities*, p.161-62

²⁷ Field Service Pocket Book, Pamphlet No. 3: Intelligence and Security (London: War Office, 1939), p.1-3.

²⁸ This was certainly the case for Edwin Bramall; likewise, Michael Carver's progress through staff roles in North Africa, initially in 7th Armoured Division and then in HQ 30 Corps; see Michael Carver, Record of Service, in FM Lord Carver Biographical Material, Tank Museum, Bovington.

²⁹ WO 171/5212 War Diary of 2 KRRC (1945) TNA, Kew.

³⁰ Various entries in WO 171/1327 and WO 171/5212, TNA, Kew.

³¹ For a detailed examination of this, see Iain Farquharson, "A High Brow Scheme to Mess People About": Missed Opportunities to Reform Staff Training in the British Army 1919-39' (unpublished PhD thesis, Brunel University, 2021).

³² French, Churchill's Army, pp.163-64, 281 and Carver, Out of Step p.69-74.

³³ Carver, p.72.

example of these positions, though there were several others, for example liaison officers. Unit commanders and officers of the brigade or divisional staff were expected to provide guidance and training to those younger officers selected.³⁴ This reliance on the knowledge and enthusiasm of small numbers of individuals meant that the quality of these 'apprenticeships' varied enormously, as noted by both David French and Michael Carver.³⁵ These staff apprenticeships thus remained the kind of individual and variable 'craftsman skill' that the DTI highlighted.

The remit of the IO at both battalion and brigade levels was quite wide. It included disseminating intelligence received from higher formations, passing locally obtained intelligence back up to these formations, providing assessments of enemy capabilities and tasking and debriefing reconnaissance patrols in support of their commander's overall intention.³⁶ However, one specific function that obviously fed into lesson-learning processes was the compiling of reports about new and unusual enemy activity or equipment, as well as their tactical methods. This data would clearly be a driver for changes made via either adaption or emulation. The function is illustrated within 4th Armoured Brigade in the reports appended to the war diaries on Schumines, 'Goliath' remote control explosive vehicles and new types of German tank³⁷ which were produced within the brigade on encountering these themselves as opposed to those circulated, usually from corps headquarters, which summarised new information.

The Brigade had the same IO for a considerable period; Captain P.F. Scott (KRRC) took the role in December 1942 and remained IO until the end of the war.³⁸ Scott is another example of the continuity of key roles within the brigade already mentioned. The material from which the IO would

³⁴ Farguharson, 'A High Brow Scheme to Mess People About', discussed throughout.

³⁵Carver, p.53, 57,72. French, *Churchill's Army*, p.163-64.

³⁶ Army Training Memorandum No. 37 (London: War Office, December 1940). Appendix F. (inf.bn.) and Field Service Pocket Book, Pamphlet No. 3: Intelligence and Security p.1-3.

³⁷ WO 169/8861 War Diary of 4th Armoured Brigade HQ (1943), WO 171/601 War Diary of 4th Armoured Brigade HQ (1944) and WO 171/4314 Brigade HQ (1945). All TNA, Kew.

³⁸ Nominal Role of Officers (various months) Brigade HQ in WO 171/601 War Diary of 4th Armoured Brigade HQ (1944), TNA, Kew.

draw information about enemy methods and the effectiveness of these, as well as the effectiveness of their own methods, mainly comprised after-action reports. These were written almost always by officers who were platoon/troop or company/squadron commanders, although short verbal debriefs were also part of this process, which is well attested via diaries, autobiographies and veteran interviews.³⁹ Unfortunately, the latter have left almost no trace. The written reports could vary greatly in both length and detail and of course sometimes there were several from a single action, at other times only one. German processes were in some ways not dissimilar and were based principally on *Erfahrungsberichte* (after-action reports). Max Visser argues that these were analysed very effectively to enable 'the continuous and methodical improvement of doctrine and tactics'.⁴⁰ A propensity for error admission and often surprising bluntness characterises many reports.⁴¹ These factors appear to have helped in identifying lessons.

It is significant that when examining war diaries of the period across British units and formations, the number of after-action reports appended varies greatly as do the number of reports written for submission to higher headquarters or the DTI. The 4th Armoured Brigade HQ war diary appears to contain more than the average for an equivalent formation in the timeframe under consideration. The table below compares a selection for 1944–45. ⁴² (*Appendix 2 contains notes on the methodology used here.*)

³⁹ John Cloudsley-Thompson talks about this in Reel 8 of his interview, 31558, IWM sound Archive. It is also mentioned briefly by Lord Bramall (interview with the researcher), who was of course an IO in 2 KRRC.

⁴⁰ Max Visser, 'Teaching giants to learn: lessons from army learning in World War II' in *The Learning Organization*, Vol. 24 (2017) Issue: 3, pp.159-168.

⁴¹ For example, 7. *SS-Freiwilligen Gebirgs-Division* in reports concerning an operation against Tito's partisans in Montenegro (May 1943). It is strongly critical of signals equipment the division is using. It is otherwise positive but compares it to a previous operation that was clearly seen to have gone very badly. T354, Roll 145. Also, 'Deployment of the 16th Panzer Division in the Termoli area' in the war diary of *16. Panzer-Division*, Italy Sep-Nov 43, which is openly critical of the delays in moving additional troops to the Termoli area and 1. *Fallschirmjäger-Division*. T-315, Roll 682, NARA.

⁴² Refer to Appendix 2 for a list of the war diaries used.

Table 1: Table of after-action and lessons reports in selected British war diaries, 1944–45.

Formation War Diaries	After-action Reports	Lessons Learnt	Reports submitted to
1944 and 1945	(Narrative)	Reports	DTI and/or DMO and
			held in their files
4 th Armoured Brigade	2	4	4
HQ	2	4	4
8 th Armoured Brigade	0	0	1
HQ	U	0	1
22 nd Armoured Brigade			
HQ (7 th Armoured	3	0	1
Division)			
29 th Armoured Brigade			
(11 th Armoured	0	0	0
Division)			
214 th Infantry Brigade	0	0	0
(43 rd Infantry Division)	, and the second	, and the second	G
147th Infantry Brigade			
HQ (49th Infantry	0	0	0
Division)			
7 th Armoured Division	0	0	1
HQ	O O		
11 th Armoured Division	0	2	1
HQ	J		1
53 rd Infantry Division	4	1	1
HQ	7	1	1

It is important to note that the brigade or divisional HQ war diaries were where 'wider learning' was supposed to be held; after-action reports can of course still be found in unit war diaries and indeed within some DTI reports, but the HQs were supposed to hold this information to allow coordination

around training and as a mechanism for passing lessons 'upwards' (via corps and army HQs) to the wider army. Within 4th Armoured Brigade, some units appear to have produced significantly more reports on operations than others. As will be seen, 3 CLY and 4 RHA seem to have produced less material than 2 KRRC, GREYS and 44 RTR. Once again, localised regimental cultures and a commander-led climate had a clear impact on the way units conducted processes. In 4 RHA's case, the impact of Livingston-Learmouth's neglected administration might offer an answer. In 3 CLY's case it is harder to determine any possible causation. Regardless of the specifics of engagement and enthusiasm, it is clear that the first two steps in gathering lessons material involved officers, principally at the platoon and company level, who then passed material to battalion/regimental IOs for dissemination to the brigade IO. Some units clearly did more of this work than others and the use of the process appears to have been largely left to the judgement of individual company and battalion commanders with little central direction from formation, corps or the army, although this began to change later in the period. Nonetheless, it is clear from what has been demonstrated here that there were only limited, formal lesson-learning procedures within the army even by the end of the war. However, it can also be seen that adaptability and responsiveness in the face of problems generated by enemy action or geography were highly prized and much discussed. In essence, there was a distinct demand but a lack of a clearly defined and organisationally practical way to address this. Thus, the army fell back onto the traditional, well-established model of individual initiative and judgement on the part of middle- and high-ranking officers.⁴³ Surprisingly, in some respects this still functioned adequately as a process, and the continued use of the CARE model illustrates this rather effectively.

Extracting 'the lessons'

The next natural step would be to evaluate the information for its usefulness, and this forms the 'analyse' element of the CARE model. There was an absence of structured and clear models like

⁴³ French, *Churchill's Army* p.279-80. In this context 'high-ranking' means brigade, division and corps commanders.

CARE in the British Army of the 1930s-40s. In fact, this was an issue that persisted certainly into the 1980s and arguably until 2003. 44 Nonetheless, it is clear that this process did take place, albeit in an organic and rather ad hoc way. Although the official army policy towards tactical lesson learning lacked formal structures and clear guidance, it was regarded as 'a good thing' and generally encouraged. This chapter and the next will examine five main examples from the brigade to show the breadth and complexity of the processes involved: two with each example relating to a specific incident and its tactical lessons, one relating to a long-term tactical problem receiving ongoing revision, another relating to a specific local problem and its resolution over time, and finally an example of larger-scale changes in overall tactical methods and organisation over time. Each example offers a range of differing and overlapping insights into the process of learning and the factors that drove this.

Deciding which incidents were worth learning from and those aspects of an operation or campaign that offered some form of enduring instruction was difficult. The way in which this was conceptualised and the relationship to ideas about fighting effectiveness are critical. At what point in a campaign or even operation did it become clear that lessons were being learned? Were defeats or victories seen as better, or more acceptable, teachers? Certainly, some incidents and operations receive far more attention in war diaries and reports, and this is the same across the numerous units and formations examined for this thesis; ascertaining why this is the case is complex. Broad trends emerge; whilst the example from Hill 113 during EPSOM,⁴⁵ which will be considered shortly, relates to a 'failure', on examining the other 4th Armoured Brigade reports from 1943–45 it does appear that successes were selected for examination and 'learning' substantially more often. The impact of enemy actions was, as already noted, decisive. Tactical methods were in a constant feedback loop with those employed by the enemy and also with any new technologies employed by either side.

⁴⁴ For a detailed review of how current processes evolved, see Tom Dyson, *Organisational Learning and the Modern Army* (Abingdon: Routledge, 2020).

⁴⁵ WO 171/1327 War Diary of 2 KRRC (1944) Major Fletcher's report on Hill 113. TNA, Kew.

The degree to which British soldiers recognised and understood German doctrine and the types of equipment used remains largely unclear, but in a document circulated within the brigade specifically to canvass opinions on changing tactics and revising the way the brigade was organised,⁴⁶ Michael Carver expressly states that 'a comparison with German and American organisation is useful in promoting discussion'.⁴⁷ This is of course a clear injunction to engage with emulation and is a necessary reminder that both enemies and allies can provide methods and structures that are useful.

Certainly, some officers exhibited clear attempts at emulation. Major Fletcher of 2 KRRC, in his after-action report on the fighting around Hill 113 during EPSOM, which involved elements of the brigade, advocated using SP guns exactly as the Germans did. He wrote that the troop from 144th Anti-Tank Battery supporting 44 RTR and 2 KRRC 'did not succeed in protecting the flank of 44 RTR. They were in posn against just such an eventuality as that which occurred.' He goes on to say that 'they did not fulfil their role because they tried to act as tanks and not anti-tank guns'. He then writes that the SP guns were deployed 'lining a ridge' but that they should have been dispersed and camouflaged, making use of the terrain. This, of course, was exactly what the Germans usually did; indeed, it was exactly how they had used their SP guns around Hill 113. In fact, the brigade had encountered German SP guns used in just this way in Italy and specifically noted the effectiveness of this in the Sangro report. Major Fletcher's report from June 1944 is also of interest as there is a second, slightly longer, after-action report covering the same fighting produced by 44 RTR. The second account mirrors Fletcher's in its narrative and broad conclusions and is equally pointed about the failings of 144 AT Battery. What is clear here is that both reports attempt to clarify what worked and what didn't within the context of fighting effectiveness.

⁴⁶ 'Lessons of Operations', September 1944, 4th Armoured Brigade Files, Tank Museum, Bovington.

⁴⁷ Ihid n 2

⁴⁸ WO 171/1327, Report by Major Fletcher, TNA, Kew.

⁴⁹ WO 169/8861 War Diary of 4th Armoured Brigade HQ (1943), TNA Kew.

⁵⁰ WO 171/873, 'Account of Operations on 29th June 1944', Appendix to June entries, TNA, Kew.

Some examples were clearly identified as making an important point of wider applicability. Brigadier Currie's report on the Sangro fighting emphasised the value of 'tanks in unexpected places'⁵¹ and is an illuminating example showing how 'lessons' could be passed upwards and then disseminated army wide. In this case, lessons of a specifically tactical type and very obviously linked to accepted ideas of fighting effectiveness. During the later phase of the fighting, 3 CLY supported 6th Battalion Inniskilling Fusiliers in an assault on the steep, rocky Li Colli ridge. During this action, 5 Corps recorded that 'tanks were forced by their crews up slopes which were as near tank obstacles as makes no difference'.⁵² 4th Armoured Brigade, 78th Infantry Division and 5 Corps all produced detailed accounts of the battle,⁵³ and via one of these, an account ended up in Army Training Memorandum No. 49 produced in June 1944 under the heading *Teamwork on the Sangro*.⁵⁴ This is a clear example of a bold offensive plan utilising new equipment's special capabilities, and of course it was successful. The specific lessons that the action offered were limited: that the Churchill tank had good performance in hilly country⁵⁵ and that small numbers of tanks could cause havoc when arriving with the element of surprise, especially as support to infantry.

The tactical gambit of projecting armour into areas of the battlefield thought to be inaccessible to tanks remained a favoured technique within the brigade. It was used again in August 1944 at Longpré in Northern France, where a company from 2 KRRC and elements of the GREYS successfully crossed a lightly guarded footbridge over the Somme which the Germans had thought unsuitable for trucks, let alone tanks.⁵⁶ Once again, a small force of tanks had a disproportionate impact and was able to dislocate the German defences sufficiently to allow a badly damaged larger

⁵¹ Contained in WO 169/8861 War Diary of 4th Armoured Brigade HQ (1943), TNA, Kew.

⁵² 'Capture of German Positions on the Sangro' (5 Corps) WO 204 / 8159, TNA, Kew.

⁵³ WO 204 / 8159 TNA, Kew.

⁵⁴ Army Training Memorandum No.49 (London: War Office, June 1944), p.9-10.

 ⁵⁵ So much so that the Germans believed for a while that the British had developed a *Spezial-Gebirgspanzer* (special mountain tank), *Nachrichten über Fremde Truppen. Nr. 22*. Within T354, Roll 147, NARA, US.
 56 See Carver p.200, Delaforce, *Marauders*, p.86 and Aidan Sprott, *Swifter Than Eagles: War Memoirs of a Young Officer 1939-45* p.133-34.

bridge to be repaired and used. Later, during the Verden fighting, 3/4 CLY were to move tanks via a narrow, muddy woodland track, initially thought entirely unsuitable by the brigade for tanks, to outflank German positions.⁵⁷ This tactic was rather obviously not without dangers. A day later, a squadron from 3/4 CLY crossed a small wooden bridge, which collapsed after the second tank, causing a Sherman to fall into the river, drowning the driver.⁵⁸

One key element relating to the Li Colli incident on the Sangro is that it was a successful example of infantry and armour acting in close co-operation, something which had been identified across the army as often problematic.⁵⁹ Thus, in this example there is a clear effort to provide learning to the wider army from a successful operation. However, in many cases, the reasoning behind choices being made for the kind of further study leading to the extraction of lessons learnt and the creation of training based on those often remains obscure. These rationales were almost never set out in war diaries or indeed in the resultant battalion or brigade schemes (training plans), so one is left to try and reconstruct these invisible motivations on the basis of what was written down and a knowledge of the circumstances and organisational culture within which the work was carried out. Undoubtedly, this void says something about the lack of structures and appropriate methodologies that has already been highlighted. Whilst the reasoning behind the selection and analysis of lessons often remains undeniably a matter of informed guesswork, the process of local conversion is, fortunately, clearer. This was largely owned by unit commanders, who had significant control over unit-level training.⁶⁰ As discussed in the leadership chapters, with the exception of 2 KRRC, there was notable continuity of battalion/regiment commanders throughout much of the studied period, and this appears to have provided a stable platform to underpin these mostly informal and frequently tacit processes.

⁵⁷ 'Operations East of the Aller' p.6. Papers of the GREYS. RSDG Museum, Edinburgh and Russell, *No Triumphant Procession*, pp.186-87.

⁵⁸ April, WO 171/4697, TNA, Kew.

⁵⁹ French, *Churchill's Army* pp. 219-23.

⁶⁰ A product of culture, organisation and doctrine; see French, *Churchill's Army*, pp.46, 59-61 and Place, pp. 65-7.

At brigade level, this was the remit of the brigade major and the staff captain, although again, the various battalion/regiment lieutenant colonels would have a considerable role, and where 'lessons' were larger or more fundamental, brigade commanders would play a part. Once a lesson or group of connected lessons had been isolated, the information was used in two ways: it was disseminated via briefings (written or verbal) to officers or all ranks and local training was put in place either to address an identified shortcoming or to provide and hone a new skill or procedure. This could take a number of forms and might be any of these: a lecture, a tactical exercise without troops (TEWT), a refresher training session or sessions (this could include activities such as range training but could be as 'basic' as repetition of a particular process) or a full-scale training exercise with troops and vehicles. The method or methods chosen clearly reflected the skill being practised and the target audience, although time and resources obviously moderated what was possible.

Examples of all of these in unit war diaries are plentiful; 2 KRRC produced a summary of the training that had already been conducted and that which was due to be conducted in December 1943 and January 1944 whilst in reserve in Italy.⁶¹ The document highlights connections to recent operations (principally the Sangro battle) and identified weaknesses. These included mine detection and clearance and rifle and LMG marksmanship, all of which were practised as a result. Of course, this begs the following question: were these the 'right' lessons or did they at least objectively reflect what happened? Looking at the accounts of the actions on the Sangro in 2 KRRC's own war diary,⁶² those of the brigade and the post-war literature,⁶³ it does appear that these choices reflect the battalion's experiences in the two assaults on Casa Casone; a large farmhouse on a particularly high escarpment of the Li Colli ridge.⁶⁴ It had been heavily fortified by the Germans and provided a

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⁶¹ WO 171/1327 War Diary of 2 KRRC (1944) 'Notes on Past Training'. TNA, Kew.

⁶² WO 169/10248 War Diary of 2 KRRC (1943) TNA, Kew.

⁶³ See, for instance, Phillips, *The Official History of New Zealand in the Second World War* Volume 1 (Christchurch, NZ: War History Branch,1957), Chapters 3 and 4, and 'The Battle of the Sangro' (1944) Directorate of Tactical Investigation. WO/232/17, TNA, Kew.

⁶⁴ This formed an important part of the German Bernhardt line.

commanding view over much of the area of the coming British operations. During the first assault, once the supporting artillery barrage lifted, the battalion was unable to suppress German LMGs and mortars with its own weapons, which led to the attack's failure. 65 Following the second, successful assault, 66 mines caused numerous casualties when clearing the ridge and reconnoitring forward from it.67 The effectiveness of mines in Italy was a significant factor; ATMs No. 47 and No. 48, issued early in 1944, both had sections dealing with this. 68 The resultant training undertaken by 2 KRRC linked directly to the problems encountered and is a clear attempt at addressing these. There are a number of similar, discrete pieces of tactical learning that can be seen throughout the period studied. In another, GREYS trained tank crews on the use of hand grenades and issued an instruction for all tanks to carry some just before landing in Italy as a result of lessons identified in Tunisia.⁶⁹ In closer country, new weapons allowed German infantry⁷⁰ to pose more of a threat to armour which the tank's own LMGs were sometimes unable to counter;71 grenades were an attempt to mitigate this. This training, of course, tacitly speaks volumes about the failure of infantry-armour cooperation. Other training is indicative of changing tactical roles. In January 1945, elements of 44 RTR used the recently captured German tank ranges at Lommel to practise firing HE in an artillery role. This had increasingly become one of their tasks but one that was not part of their established function or that they had trained for to any significant extent. This training took place under the direction of officers from 4 RHA,72 a clear example of unit lessons processes drawing on expertise from other parts of the brigade. It is not that these kinds of specific short-term learning steps were unusual within British units more generally, but the brigade's units appear to do this more often and with more focus than many others. Beyond these compact and localised processes, however, lesson learning is less clear and easily identifiable.

⁶⁵ Wake and Deedes Swift and Bold p.181.

⁶⁶ A silent assault without artillery, relying on stealth.

⁶⁷ Kings Royal Rifle Corps Chronicles 1944 (Winchester: Gale and Polden, January 1945), p. 36.

⁶⁸ ATM No.47 (January 1944) and ATM No. 48 (May 1944).

⁶⁹ WO 169/9314 War Diary of GREYS (1943) TNA, Kew.

⁷⁰ Who were already doctrinally disposed to aggressive anti-tank action; see *Truppenführung* sections 751-758 within Condell and Zabecki, eds., *On the German Art of War: Truppenführung*.

⁷¹ Bill Bellamy, *Troop Leader* (Stroud: Sutton, 2007) pp. 66-67, gives a chilling account of the results of tank LMGs limited fields of fire and the need to factor these into the positioning of vehicles in cover.

⁷² WO 171/4715 War Diary of 44 RTR (1945) TNA, Kew.

Sharing lessons and the wider context

The next part of the learning process is where one sees a far greater divergence from the modern CARE model. The 'resolve' phase is much harder to identify. In current practices this is where information is collated and distributed, but, critically, where 'what is important is that it is accessible to those who are responsible for delivering change ... those in the chain of command who drive the change ... and more widely to ... see what lessons are out there'. 73 The importance of sharing information vertically and laterally is now clearly understood, if perhaps not always practised, 74 but the British Army of this period was, for several reasons discussed herein, not inclined to work in that way. Culturally, as the previous chapter illustrated, the regimental system created issues that frequently led to an inward-looking and protective attitude amongst senior officers at the regiment/battalion level. Whilst this localised and exceptionalist focus was also the wellspring of regimental pride and esprit de corps, 75 these systems created often quite separate sub-cultures contained within, at best, small groups of battalions and at times single battalions.⁷⁶ The differences between the arms exacerbated this problem, and the lack of widely undertaken inter-arm and interunit training exercises or training courses further compounded the difficulties. This last absence was one much commented on in later assessments of the army's performance.⁷⁷ As previously noted, the nature of much of the war further enhanced the areas of separation and difference; the disparate theatres, geographically and organisationally isolated, allowed separate cultures and approaches to grow and thrive.⁷⁸ Thus, the dissemination of lessons across the British Army in its entirety, and indeed even at the corps and army levels, was undoubtedly an area of weakness.⁷⁹

⁷³ Lt. Col Tony Gawthorpe, British Army Lessons Exploitation Centre (LXC), information slide delivered in briefing to Metropolitan Police Service (June 2021). Quoted with consent of LXC and MPS.

⁷⁴ See Sergio Catignani (2014) 'Coping with Knowledge: Organizational Learning in the British Army?'.

⁷⁵ French, Churchill's Army pp.123-25.

⁷⁶ French, *Military Identities*, Chapter Ten.

⁷⁷ There is a wide range of material here, but see, for instance, Williamson Murray in *Military Effectiveness, Volume 3* pp.124-29, Place pp.128-30 and French, *Churchill's War*, pp. 267-70.

⁷⁸ Place, *Military Training*, pp.15-16.

⁷⁹ For a good summary of this see Max Visser, 'Organizational learning capability and battlefield performance: The British Army in World War II'.

Despite these profound issues, it is important to understand that, on a narrower front, components of the resolve element were taking place at a local level in some formations. Charles Forrester's 2010 PhD80 thesis looked at a number of brigades and divisions and identified ways in which their commanders and other senior officers generated new tactical and operational methods that in turn helped to shape British doctrine. He argues that this was largely carried forward by a fairly small minority of formations⁸¹ and that this principally rested on formation commanders' abilities and attitudes. Forrester's idea of 'innovators' seems a credible concept, and primary sources already discussed here support the idea. This becomes clearer when the final phase is considered, exploitation. It appears quite distinctly that lessons were being captured and analysed and then used to create new practices or modify old ones at the unit and formation levels. It is important here to outline what was feasible organisationally and doctrinally/tactically to understand the extent to which commanders could change and innovate. Therefore, it is necessary to briefly consider the wider context of how the British Army fought between 1943 and 1945 and some specific ideas and practices relating to doctrine, innovation and tactical methods. These shaped both what was possible and what was commonplace in terms of organisational learning. As this thesis has already noted, the methods of Eighth Army in Italy and the whole of 21st Army Group in North-West Europe are, in most of the historiography, closely linked with Montgomery's 'colossal cracks' approach.82

Montgomery was, at the tactical and operational levels, concerned with three key elements, minimising casualties, maintaining morale and keeping 'balance'. 83The last idea, of balance, is particularly interesting; specifically, he stated that he intended to succeed in 'unbalancing the enemy while keeping well balanced myself'. 84 He stated that he tried to achieve this by disguising the main attack and forcing the enemy to commit their reserves early. His own reserves would be carefully

⁸⁰ Charles Forrester, 'Montgomery and his Legions'.

⁸¹ He singles out 7th and 11th Armoured Divisions, Guards Armoured, 49th Infantry Division and, most importantly here, 4th Armoured Brigade as all being influential within this process.

⁸² For a detailed examination of the concept see Hart, *Colossal Cracks*. Discussed in detail throughout. ⁸³ Hart, ibid.

⁸⁴ Montgomery, *Memoirs*, location 4917 (Kindle edition).

guarded and, once committed, replaced as quickly as possible.85 Montgomery was a deep thinker with 'boundless self-belief and ruthless professionalism', 86 and his interest in, and enthusiasm for, training was an important component of his plans to revitalise Eighth Army in 1942 and had been a core concern throughout his career.⁸⁷ However, despite this and his ultimate success in North Africa, he is often held to have contributed to the doctrinal chaos that pervaded the army between 1941 and 1944.88 Montgomery authored, and in other cases commissioned, a number of tactical doctrinal documents in North Africa in 1942 and 1943 (for Eighth Army) and before D-Day in 1944 (for 21st Army Group) that differed from the established War Office doctrine. 89 Stephen Hart maintains that Montgomery retained a strong interest in, and involvement with, tactics and sought to implement what he saw as emerging tactical lessons as swiftly as possible.90 His opinions could change over time, though they would be expressed as equally authoritative at each point. In early 1944, Montgomery favoured the retention of echeloning tanks and infantry with armour leading and infantry close behind but still separate.⁹¹ The documents he issued supported this.⁹² However, during the Normandy fighting his opinion seems to have been changed by events.⁹³ Forrester argues convincingly that Montgomery's changing views were driven by the outcomes of operations and feedback from divisional and brigade commanders. Whilst much of the established historiography has undoubtedly put too much emphasis on Montgomery's personality (fascinating as it is) as a dynamic within the running of both Eighth Army and 21st Army Group, 94 his personal influence was clearly a factor in who got to command formations, and this will be returned to.95 lt can be seen that there has been some revision of the view that the 'colossal cracks' approach was 21st Army Group's only, or even main, approach in recent years, and this chapter has already shown

⁸⁵ Montgomery, ibid.

⁸⁶ Brian Bond, Britain's Two World Wars Against Germany (Cambridge: CUP, 2014) p.154.

⁸⁷ For an incisive, brief examination of his time in command of 3rd Infantry Division, refer to Anthony King, *Command* (Cambridge: CUP, 2019) pp.131-36.

⁸⁸ Place, pp.149-52 and Hart, pp.120-21.

⁸⁹ Hart, pp. 69-70.

⁹⁰ Hart, p.120.

⁹¹ Place, pp.147-52.

⁹² MTP No.63 The Cooperation of Tanks with Infantry Divisions, (London: War Office, May 1944).

⁹³ Forrester, 'Montgomery and his Legions', pp.81-82, 117, 119.

⁹⁴ Lloyd Clark, lecture, University of Buckingham, April 2020. Montgomery was surrounded by a capable and influential team of staff officers.

⁹⁵ Buckley, Monty's Men, pp. 33-34.

that other approaches were certainly in use. There is a robust and growing body of scholarship demonstrating that from the late summer of 1944 onwards, new ideas and methods were actively sought and adopted.⁹⁶

The 'colossal cracks' method sits mainly at the operational level, and the actions of an individual formation such as 4th Armoured Brigade will of course relate chiefly to the tactical level.

Nonetheless, across 21st Army Group, it is possible to find tactical-level operations, planned and carried out by single formations or formation-strength groupings of units, during the period which very much fit the 'colossal cracks' template. Indeed, Carver railed against the methods of Major General Ross of 53rd Infantry Division⁹⁷ during the Normandy break-out in August 1944 as being too reliant on set-piece attacks, slow and insufficiently flexible. However, British commanders at formation and unit levels were well aware that they both needed to conserve manpower and keep casualties within acceptable parameters and that they should endeavour to maximise the effect of their material advantages whenever they could. These were key tenets of Montgomery's approach between 1943 and 1945, but it was also clear that this did not preclude bold and innovative tactical approaches at unit and formation levels, and these were largely accepted by higher commanders, including Montgomery himself, as long as they remained effective.⁹⁸

Using the present-day British Army's CARE model to examine the lesson-learning processes and the resources given to these has illustrated that these processes were not, as they existed in the 1940s, sophisticated. Organisational learning at the tactical level was highly dependent on the skill and enthusiasm of relatively small numbers of soldiers within the brigade HQ and individual units. As a result, the quality of learning and ensuing tactical changes varied significantly between formations. Additionally, mechanisms for passing learning and new tactical methods around the

⁹⁶ Forrester, 'Montgomery and his Legions', Devine, *The British Way of War in Northwest Europe*.

⁹⁷ Carver, pp.196-7.

⁹⁸ Jonathan Fennell, *Fighting the People's War*, pp. 591-95 for a discussion of this.

army were slow moving and inefficient. Nonetheless, it is also obvious that there was strong interest in modifying tactics through lesson learning. The next chapter will examine how individual commanders within 4th Armoured Brigade, at brigade, battalion and company/squadron levels worked to modify or replace what are frequently labelled as Montgomery's methods. This will show the specific influences exerted by terrain and the enemy and the arrival of new equipment. Changes could be made to the way a particular task was carried out or to the way units or sub-units were organised, and the next chapter has examples of both of these.

Chapter 3. Fighting, Learning and Adapting

Both of the brigadiers considered in this work, John Currie and Michael Carver, were part of the group of commanders who were both intellectually and professionally enabled, and sufficiently motivated, to make changes to tactical methods and unit and formation organisation. Formation commanders of this type are those that Forrester identifies as 'innovators',¹ leveraging overwhelming firepower and high mobility to deliver fast-moving, flexible and aggressive offensive operations that nonetheless suffered comparatively light casualties. An illustration of how this could work, in an area identified as problematic over a longer time, can be seen below in the first example. Material here is drawn from a number of documents from the brigade, spanning several years and discussing a well-recognised tactical problem. The chapter will then consider how specific and localised issues were dealt with using a problem-solving approach that sometimes had a wider, longer-term impact. Finally, it will examine higher-level changes to the way the brigade was organised for operations, showing how and why this was revised and the effects the changes achieved.

The Problems of Cooperation and Communication

Shortly after arriving in Italy in October 1943, 4th Armoured conducted an exercise that was specifically based on 'lessons learnt' around inter-communications within the brigade.² This involved small detachments from each unit working as if with their full unit in a real-time exercise to test signals and administration procedures. The preceding operations in Tunisia and Sicily, although the latter involved only elements of the brigade, had been difficult and beset with organisational issues

¹ Forrester, pp.155-57.

² WO 169/8861 4th Armoured Brigade HQ War Diary October 1943. TNA, Kew.

even though both were ultimately victorious.3 'Intercom' is mentioned as a challenge several times in both brigade and battalion/regiment war diaries in 1942 and 1943.4 This had been widely identified as a serious difficulty for the army more generally in North Africa in 1941 and 1942.5 Williamson Murray has argued that 'the overly structured nature of the training system' was part of the problem; 'it tended to create a 'we-they' syndrome ... without clear understanding of the problems facing the other branches',6 and this accords with much of the evidence already adduced in this chapter. It was also a function of poor-quality radio equipment and an overburdened signals training system which often left units critically short of fully trained W/T operators. This area was thus both a doctrinal/tactical and a technical/technological problem, and this wide scope makes it particularly useful as an illustration of processes and thinking around organisational learning. Undoubtedly, this was an area identified across the army as problematic and therefore one very likely to be addressed in any attempts at learning from experience and creating new methods. The Brigade's Sangro operations report refers to '[t]he old bugbear of inter-communication with the inf[antry]'.8 The scenario of infantry and armour cooperation was the area that saw the greatest difficulties with inter-unit collaboration, and a vast amount was written about this both during the war and in the post-war historiography. It was a particularly challenging area for independent armoured brigades because their role saw them operating alongside a frequently shifting cast of infantry battalions.

The brigade's report suggests that simple measures could overcome this 'bugbear', mainly that 38 Sets (infantry radios) should be mounted in some tanks and that armour and infantry should train

³ On Tunisia, see David Fraser, *And We Shall Shock Them* pp. 351-59; on Sicily see James Holland, *Sicily* (London: Corgi, 2021) pp. 578-81(Kindle edition).

⁴ For instance, the CO of 3 CLY was killed in Sicily whilst attempting to coordinate infantry with his armour; see WO 169/9332. Inter-unit communications were described as 'not working too well' in Italy during September 1943 by Brigade HQ, WO 169/8861, both TNA, Kew.

⁵ Fennell, *People's War* pp.178-79.

⁶ Murray in *Military Effectiveness: The Second World War* p.128.

⁷ George Forty, *Companion to the British Army 1939-45* pp. 25-26 and Anthony C Davies, 'WW2 British Army Battlefield Wireless Communications Equipment' (2008) Paper at HISTELCON 2008.

⁸ '4th Armoured Brigade in Italy', p.13. WO 169/8861. TNA, Kew.

strongly preferred: 'It is remarkable what can be achieved by troops who know each other and have mutual confidence.'9 The report stresses that 4th Armoured and 38th Infantry Brigades had spent much of November training together and in proximity to each other and that this allowed them to operate more cohesively. The importance of prior knowledge and training together was one of the areas emphasised when the account appeared in ATM No. 49, mentioned above. All of this shows that specific problematic areas of infantry—armour cooperation, the points of friction, had been identified within the brigade and endeavours were made to address these. Anthony Bashford recalled that many of the British infantry units the brigade supported "hadn't been trained to work with tanks". He noted that the US Airborne troops they fought alongside briefly in the autumn of 1944 were much better at this and coordinated straight away. He added, "perhaps airborne troops are different", alluding to their ethos and enhanced training.

Despite the great efforts made in producing lesson learning and new training, as well as the requests for new equipment shown above, the issue of infantry and armour inter-communication via radios was never really resolved. The armoured regiments could never obtain enough 38 Sets¹² and had difficulty using those they did get due to the limited space for them in the already cramped Shermans.¹³ The 'Handy-Talkie Sets' (American hand-held radios) referred to in the report on infantry–armour communication¹⁴ produced by the brigade in November 1944 never materialised either despite a promising trial. In the brigade's report produced following the fighting on the Aller (April 1945), the author notes, 'There is still NO satisfactory means of comm between tanks and dismounted inf. This is an urgent problem which demands immediate and extensive research.'¹⁵

⁹ WO 169/8861, '4th Armoured Brigade in Italy', Sangro section, p.13.

¹⁰ Moreover, though not mentioned in the report (perhaps as it would be a given), they also 'knew' each other from North Africa.

¹¹ Anthony Bashford (44 RTR), Reel 4, 12907, IWM Sound Archive.

¹² WO 232/38 'Armour Cooperation with Other Arms', TDI Report, August 1945. TNA, Kew.

¹⁴ WO 171/601 Appendix, November, Also, 4th Armoured Brigade Signals war diary, WO 171/602, TNA, Kew.

¹⁵ 'Operations East of the Aller', copies in Papers of FM Lord Carver (IWM) and War Diary of 44 RTR 1945, TNA, Kew. Emphasis in original.

Frequently, it remained a matter of infantry officers clambering onto tanks or even tank officers dismounting and finding their opposite numbers.¹⁶

The same problems were being identified in the Far East late in the war, in November 1944; 32nd Indian Infantry Brigade wrote a lengthy report for 4 Corps (Fourteenth Army) about operations in the preceding summer.¹⁷ The report contains a substantial section (5 sides of A4) on cooperation with armour.¹⁸ The similarities with the reports already discussed from Italy and North-West Europe are striking: communication/coordination between armour and infantry was problematic and armour was vulnerable in close country. Interestingly, the document also draws very similar conclusions to John Currie's 'tanks in unexpected places' account about the value and impact of getting armour into topographically challenging areas. The report makes special mention of the battle of Nunshigum (April 1944, Burma), where tanks of the 3rd Carbineers were able to climb a steep and narrow mountain track to surprise Japanese defenders on the summit, an operation all the more striking as it was (at the tactical level) planned and led by NCOs.¹⁹ Nonetheless, the focus on the many difficulties and the admission that some of them seemed to be intractable are the most important elements of these narratives.

Overall, what was critical was finding ways to make these difficulties less problematic. This was what 4th Armoured Brigade achieved through the application of inter-unit familiarity, preparatory training and a clearly and widely understood plan for each operation. The acceptance of difficulties and the development of mitigation strategies (even whilst continuing to seek solutions) is clearly

¹⁶ Mentioned in 'Operations East of the Aller' but also in interview with Douglas Browne (44 RTR), who described several such incidents in 1944 and 1945. Also mentioned as a cause of high levels of casualties amongst officers and SNCOs by 44 RTR in their account of the fighting at Uedem, Papers of FM Lord Carver, IWM.

¹⁷ 'An Account of the Operations of 32nd Indian Infantry Brigade' (November 1944) Papers of 3rd Carabineers, RSDG Museum, Edinburgh.

¹⁸ 'Summary of the Main Lessons of the Operation of Tanks in the Present Campaign' within 'An Account of the Operations' cited above.

¹⁹ Bryan Perrett, *Tank Tracks to Rangoon* (Barnsley: Pen & Sword, 2014).

illustrated in the training and planning undertaken in later 1944 and early 1945. The extensive rehearsals of the assault on Wanssum²⁰ and the brigade's part in the Rhine crossing (PLUNDER) both give good examples of efforts made to reinforce inter-unit cooperation and the understanding of a plan.²¹ 3rd Infantry Division produced an after-action report reviewing the Wanssum operation. This specifically mentioned the rehearsals and the briefing of the plan as material to the operation's success.²² The report 'Operations East of the Aller' produced by the brigade emphasizes the importance of plans being 'kept simple'.²³ The theme of simplicity and everyone understanding the plan was returned to in a much later speech Edwin Bramall gave to newly commissioned infantry officers in 1984 when he was the chief of the defence staff.²⁴ Referring to both Montgomery and Slim, he said that 'on the eve of battle, every soldier knew, where possible, what to expect ... what his objectives were ... what was happening on his left and right'. He added, 'I remember these eve of battle briefings well from the Normandy beaches onwards' and advocated the continued use of this approach despite its potential for security risks. However, not all learning and change was as long-term or complex as the thorny issue of infantry–armour cooperation. There were sometimes 'quick fixes' for localised issues.

The specific and localised

Specific, immediate opportunities could be identified and seized; in these, changes in topographical factors had a particularly powerful influence. Throughout the campaign in Holland, the very open, flat country was taxing for both armour and infantry. Charles Lewer²⁵ recalled an attack put in by 2 KRRC on the outskirts of Goirle; the field they attacked across was "like a billiard table", and at one point he found himself behind a mole hill, the only thing resembling cover he could find. Exposed,

²⁰ A small town in eastern Holland, captured in January 1945. See WO 171/4697, War Diary of 3/4 CLY.

²¹ See WO 171/4314 4th Armoured Brigade HQ (1945) entries for March on training and preparation and the Op order for PLUNDER. TNA, Kew.

²² 'Op Against Enemy in Area Wanssum 7/8 Jan' in WO 171/4697, TNA, Kew.

²³ 'Operations East of the Aller' p. 25.

²⁴ Speech to Infantry Platoon Commanders Course, Warminster, May 1984. Papers of FM Lord Bramall, University of Buckingham.

²⁵ Charles Lewer. Interview by this researcher, 25/06/2012.

level country tended to reinforce the importance of longer-range weapons and made both tanks and infantry more vulnerable. During much of the later part of this period, roughly October 1944 to January 1945, the brigade occupied two static defensive lines, a role it was neither equipped nor trained for. This more open ground also allowed new tactical options; in Belgium and Holland, 2 KRRC began to 'brigade' the battalion's medium machine guns (Vickers .303s) with the small number of newly arrived Browning .50 calibre heavy machine guns (which were all vehicle mounted) as well as the handful of Boys AT rifles they had somewhat mysteriously retained.²⁶ The battalion had two machine gun platoons, each with four MMGs, within the support company. The normal practice was to move these platoons around to support the motor companies or attached infantry, and far from concentrating them, they would often be split down into smaller sub-units.²⁷ This was thus a significant change. In addition, the motor companies' mortar platoons were also frequently concentrated to support this, 28 and also, less frequently, the support company's 6pdr anti-tank guns also took part.²⁹ This combination allowed them to deliver devastating barrages of both direct and indirect fire at long ranges, which a more congested landscape would have prohibited. Whilst there are no German figures to compare them with, 2 KRRC did record known enemy casualties in personnel and vehicles, and these were considerable³⁰ and, importantly, probably reflected only a small percentage of those killed and wounded. The policy also visibly dampened enemy enthusiasm for raids and counterattacks; the war diary records these becoming less common towards the end of their stay. During this period, 'we shot up any movement actually seen and harassed likely areas at night',³¹ and also, 'all known enemy headquarters were shot at with all we could find'.³² At Weert, the MGs were 'laid on fixed lines on the only bridge across the canal, firing at this all night at short

²⁶ It was a weapon generally considered obsolete and certainly poorly regarded by most; see French, *Churchill's Army* pp. 88-89. However, 49th Infantry Division submitted a report to the DTI in January 1944 on the efficacy of the Boys as an anti-personnel weapon in Italy within WO/232/7 DTI reports, TNA, Kew. Similar observations may have been made by 2 KRRC in that theatre.

²⁷ This is evident from both the KRRC war diaries from 1943 and early 1944 and the veteran accounts. It is also commented upon in Toby Wake's letter to his father, September 6th, 1944, Papers of FM Lord Bramall, University of Buckingham.

²⁸ Mentioned twice in 'A Short Account of Operations of 2 KRRC, 14 Sep-2 Nov '44' in WO 171/5212, TNA, Kew.

²⁹ For instance, at Thorne on January 1st, 1945, WO 171/5212.

³⁰ Report, 'Short Account of Operations', in WO 171/5212 War Diary of 2 KRRC (1945), TNA, Kew.

³¹ 'Short Account of Operations'.

³² Ibid.

intervals. This was probably the best harass we have yet done.'33 The brigade's motor battalion utilised the landscape and new weapon systems and repurposed old ones to achieve tactical advantages, once again showing how technology and topography intersected. An important factor here is that on the Maas, the brigade held a stretch of line previously defended by most of a division, and although stretched very thin, it was successful in this task.³⁴ 2 KRRC's aggressive posture (it also patrolled extensively) was highlighted as helping to accomplish the mission by both the brigadier and the corps commander.³⁵ These approaches appear to have emerged through a mixture of all three of the change methods discussed earlier: the adaption of pre-existing well-established tactics, the emulation of methods in use by the divisional machine gun battalions that existed in some infantry divisions and actual innovation on the part of 2 KRRC in terms of the brigading of the MMGs and mortars and the co-opting in of different weapons to these types of shoot.

Unsurprisingly, given what has been discussed so far, there is nothing written in the battalion or the brigade war diaries about why this was done the way it was or how these practices were arrived at. However, although born out of a specific situation, the battalion and brigade chose to retain the centralised support weapons group afterwards.³⁶ One can surmise that as an independent armoured brigade redeployed constantly and being attached to different formations on a regular basis, the units within it were exposed to many different practices and approaches within the British and Canadian armies. It is worth noting that the brigade was under the command of four different corps (8th, 12th and 30th British and 2nd Canadian), each more than once and seldom for more than a few weeks on each occasion, between D-Day and the end of the war in Europe.³⁷ This scenario also

³³ Wake and Deedes, p.270.

³⁴ WO 171/601 War Diary of 4th Armoured Brigade HQ (1944). The task necessitated occasions when tank crew had to deploy as infantry.

³⁵ Letter from Brig. Carver in WO 171/5212 War Diary of 2 KRRC (1945) and the corps commander's message in Delaforce, *Marauders*, p.91.

³⁶ See Operational Order for the attack on Uedem in WO 171/5212, TNA, Kew, spelt as Udem in most British documents seen for this work.

³⁷ 'Changes of Command – 4th Armoured Brigade'. Document within Box 1, Papers of FM Lord Carver, IWM.

illustrates the way that new practices emerged at unit level but were often accepted or encouraged by the brigade's headquarters in a process very similar to Forrester's bubble-up model.

The key questions here, of course, are, were the tactics and methods 2 KRRC employed significantly different to those of other broadly comparable units and did they increase the brigade's fighting effectiveness? The methodology clearly rested considerably on what machine gun battalions and the later support battalions were already doing, but these units had significantly more MMGs as well as a company of 4.2-inch heavy mortars.³⁸ Whilst often deployed as companies or even platoons across a division, these battalions could concentrate to provide heavier fire in support of offensives or to repel larger enemy attacks.³⁹ Motor battalions, as part of armoured brigades, generally lacked the option of relying on significant artillery assets as infantry divisions could, but they were more heavily equipped in terms of light support weapons than standard infantry battalions. 40 Although each motor battalion had a support company, the battalion's mortars were divided up between the three motor companies; centralising these was not a standard procedure, and, as already mentioned, the MMGs which were part of the support company were usually deployed as separate platoons. 12 KRRC, the motor battalion of 8th Armoured Brigade, did not change the way it organised its support weapons during 1944 and 1945,41 although in the final weeks of the war, it somehow obtained a handful of 4.2-inch mortars which were not part of a motor battalion's establishment.⁴² The same is largely true for 1st Battalion the Rifle Brigade (1 RB), the motor battalion of 22nd Armoured Brigade; indeed, this brigade appears to have decentralised some support weapons by creating an additional anti-tank detachment for the brigade in August 1944.⁴³ This latter example also demonstrates once more how innovation around battalion and brigade

³⁸ Ben Kite, Stout Hearts, p.42-43.

³⁹ Kite, ibid. See also the account of this role in the interview with Roy Hubbard (1st Battalion, Manchester Regiment), 21104, IWM Sound Archive.

⁴⁰ WE II/231/3 January 1944 reproduced at <Vickersmg.org.uk> [retrieved 23/07/2021].

⁴¹ WO 171/613, War Diary of 8th Armoured Brigade HQ (1944) and WO 171/4327 (1945), TNA, Kew.

⁴² WO 171/4327, War Diary of 8th Armoured Brigade HQ, 1945.

⁴³ By splitting elements off from 1 RB's support company with additional drivers and vehicles loaned from the armoured regiments. War Diary of 22nd Armoured Brigade HQ (1944). WO 171/620, TNA, Kew.

organisation was occurring within some formations and units across the army and happened at the behest of local commanders responding to local circumstances. Again, the AT detachment was retained by 22nd Armoured Brigade in the longer term, showing that relatively minor reorganisations within brigades were permitted and accepted. Carver recommended the centralisation of all motor battalions' mortars in just this manner in his long report 'Composition of an Armoured Brigade', which, although undated, appears to be from December 1944.44 This report contained his recommendations for the modification of armoured brigade structure and was circulated to the brigade's corps and army HQs and illustrates his desire to share 'best practice' or at least his wish to claim his brigade's methods as examples of this. The reorganisation of 2 KRRC's MMGs and mortars was a relatively small-scale change, effected quickly. The previous example looked at how the brigade dealt with a much larger-level issue, with links to doctrine, training and equipment, over a prolonged time period and showed that only limited progress was made despite considerable effort. However, between these two points there was another group of learning and change which specifically related to the tactical organisation of the brigade for operations, and it is within this area that one can see both the most significant learning and the greatest tactical impact derived from this. The next section looks at a striking and well-documented example of this.

A Short Circuit and a Wide Net

In some circumstances, a brigade might take very different and radical approaches to the lesson-learning process and tactical change, and this became the case shortly after Michael Carver arrived at 4th Armoured Brigade. The quote that begins part three of this work comes from a training memo produced in July 1944: 'If we all start thinking hard and pool our ideas, we shall outwit the enemy.'⁴⁵ The documents involved show that an almost unprecedented level of data collection and creative thought, certainly by the standards of the British Army of the period, was put into modifying tactical

⁴⁴ Contained in WO 171/601 War Diary of 4th Armoured Brigade HQ (1944).

⁴⁵ '4th Armoured Brigade Training Memorandum No.2', 4th Armoured Brigade papers, Tank Museum, Bovington.

practices within the brigade from the late summer of 1944 onwards. It seems the net was cast wider in terms of where ideas might come from for producing, in effect, a short circuit of the accepted, limited, lessons process. The process begins with two documents created in July: a review of the brigade's part in Operation JUPITER and Training Memo No. 2. The lessons document for JUPITER opens as follows:

Certain lessons, well known, but not fully realised have been emphasised by the action of both our own and enemy tanks in the past few days.⁴⁶

This indicates that what follows is an attempt to consolidate and clarify existing knowledge, which had now become more pressing following the calamitous operation. The events of July 10th and 11th concerning the brigade are difficult to reconstruct in detail. The war diaries give fairly brief and generalised accounts of occurrences, often omitting actions by detached sub-units. There are several participant accounts but these only describe small, specific parts of the operation, although they nonetheless convey the chaos and destruction powerfully.⁴⁷ Whilst none of the armoured regiments were committed to supporting the infantry on July 10th as initially intended, some squadrons and troops clearly did move forward and the enemy was certainly engaged at times. 3 CLY claimed six tank kills and GREYS five. The units were under heavy and sustained mortar and artillery fire for much of the day. In the late afternoon, at least one Tiger (probably from *Schwere SS-Panzer Abteilung 102*)⁴⁸ infiltrated closer to the brigade's position and 'started a direct shoot onto our vehicles'.⁴⁹ This was possible due to the confused situation on the nearby Hill 112. As a consequence of this and the general bombardment, 2 KRRC suffered 88 casualties and GREYS about 40. In addition, over the two days GREYS lost three tanks and 3 CLY one, and 2 KRRC, GREYS and 3 CLY all had a number of trucks and carriers destroyed.

4

⁴⁶ 'Lessons from Operations – Operation JUPITER', (undated), 4th Armoured Brigade papers, Tank Museum, Bovington.

⁴⁷ Refer to Sandy Stowe, letter to Toby Wake (September 1986) in FM Lord Bramall Papers, University of Buckingham. Accounts of Lord Brammall and Ted Wood (Researcher) and Godfrey Welch, Sidney England and Fred Cooper (IWM Sound Archive).

⁴⁸ Reynolds, Sons of the Reich, pp. 38-40.

⁴⁹ WO 171/1327 2 KRRC, (10/07/1944) TNA, Kew.

The post-JUPITER report is blunt about the superiority of Tigers and Panthers over Shermans, stating that the latter can be hit successfully by both of the former 'at 2,000 yards' (1.8 kilometres),⁵⁰ whilst 'the only gun we have which can be certain of knocking out the Tiger, and in most cases, the Panther is the 17pdr'. It goes on to add that the 17pdr is excellent. In tactical method terms, the report argues that tanks crossing open ground should be supported by artillery just as infantry are. Smoke should screen the flanks and barrages should hit likely anti-tank positions. The significance and danger of reverse slope positions on hills is reiterated. The importance of good reconnaissance and the rapid transmission of information is stressed, adding, 'Only by a constant spirit of aggressive inquisitiveness can good information of the enemy be obtained.'51 The next step is where something unusual happens. On the 25th of July, Brigadier Carver issued '4th Armoured Brigade Training Memo No.2'. As has already been discussed, this opened with some concise, accurate observations about German tactical methods and suggests that at least one of these (immediate counterattacks) has already been identified as a potential weakness to be taken advantage of. He then posed a series of questions which all relate to breaking through German defensive lines and how such breakthroughs might be exploited. The document was copied to every squadron/company commander in the brigade and Carver made it clear that he was looking for ideas from everyone.

Four replies have been preserved; it is possible there were others as the document was also sent to 4 RHA, the brigade RASC unit and 14 LFA. However, there is a reply from each of the three armoured regiment COs and that of 2 KRRC.⁵² These must have been provided relatively quickly; whilst only two of them are dated, both from July 31st, 3 CLY's is signed by Lt. Col. Sandy Cameron,

⁵⁰ Interestingly, Carver uses the correct German names for the main guns used and is clear about which AFVs have which. This is unusual in brigade or divisional reports, even in those from armoured units.

⁵¹ All here from 'Lessons from Operation Jupiter', two A4 sides, 4th Armoured Brigade Papers, Tank Museum, Bovington.

⁵² Responses to 'Training Memo No.2.' 4th Armoured Brigade Papers, Tank Museum Bovington.

who was removed at the beginning of August. All four responses propose solutions to Carver's tactical problems and acknowledge that the issues have been discussed within the unit. Before considering what was suggested by the units and the actions taken thereafter, it is important to reiterate how very unusual this process was in British formations of the period. Certainly, the written record has most likely missed some evidence, because, as the thesis has already shown, many processes were informal and largely verbal, but even allowing for this, 4th Armoured Brigade's efforts appear to be rather exceptional. No equivalent group of documents could be found in any of the war diaries listed previously in Figure 4.

The four responses vary in length and detail but each makes a variety of suggestions, there is no indication that the COs conferred with each other. All make different suggestions, although there are common themes, and all four reports are structured differently. As one might expect from experienced units, there are a considerable number of suggestions, all of which are strongly practical. Everyone emphasises the importance of good reconnaissance prior to any attack.

Defensive artillery fire and MMGs should be used to break up enemy counterattacks. Infantry occupying positions should dig in as soon as possible in preparation, and any armour that assisted them onto their objectives needs to remain close at hand, ideally in concealed, hull-down positions.

GREYS, 2 KRRC and 3 CLY note the effectiveness of fighter-bombers, such as Typhoons, in the close support role and advocate more usage and better integration. Lt. Col. Hopkinson of 44 RTR produced the longest and most detailed report and also the one which made the strongest efforts to incorporate the operations of the entire brigade along with likely supporting elements. It is perhaps unsurprising that he was chosen to be Carver's deputy at about this time, retaining the role for the rest of the war.

On the 23rd of September, Carver issued the last document of this sequence. Sadly, the replies to this have not be retained, it seems. The document *Lessons of Operations* summarised what had

happened previously and then, once more, set out some questions. Again, it was copied to all unit OCs down to company/squadron level. The questions asked here are relatively short and worth reproducing in full:

- a) Is the organisation of the armd bde the best it could be; if not, what changes should be made?
- b) Is the organisation of the unit (armd regt, mot bn, RHA regt and admin units) the best
 - i) For the armd bde as it is;
 - ii) For the armd bde as altered if considered necessary in (a) above
- c) What is the best organisation for an armd div?

This set of questions, and the answers received, are unquestionably the basis for the undated report, probably issued in December 1944, titled 'Composition of an Armoured Brigade'.⁵³ The document is a comprehensive (ten page), rationally argued review of the structure and function of the independent armoured brigades. It sets out the varied roles the brigade had been used in up to that point, commenting that 'it would clearly be impossible'⁵⁴ to design a formation fully suited to such a wide variety of tasks. The report specifies that it considers the main role of an armoured brigade should be 'close support of inf' and 'breakthrough and pursuit' and that the composition proposed will reflect this.⁵⁵ These two key tasks were in fact exactly those intended in the most recent British doctrine, as expressed in *MTP No.63.*⁵⁶ The brigade's document does not propose anything radical but rather a large number of 'tweaks' (some quite significant) to the existing arrangements in terms of organisation, equipment and tactics.

⁵³ 'Composition of an Armoured Brigade' in WO 171/601 War Diary of 4th Armoured Brigade HQ (1944). ⁵⁴ 'Composition', p.1.

⁵⁵ Ibid. p.1.

⁵⁶ MTP No.63. The Co-operation of Tanks with Infantry Divisions (May 1944) copy within WO 232/38, TNA, Kew. See page 6 regarding the primary roles intended for armour.

'Composition of an Armoured Brigade' argues that brigades need a stronger and better equipped reconnaissance element, some form of Royal Engineers detachment,⁵⁷ more armoured recovery and utility vehicles (such as bulldozers), more and better vehicles for the light field ambulance and that the motor battalion needed to be considerably larger.⁵⁸ It also argued for the centralisation of the motor battalion's 3" mortars, which was, as discussed, already the case within 2 KRRC. It can be seen that the report reflected developments and demands within 4th Armoured Brigade which had not necessarily been created or driven by the brigadier or the brigade HQ, reflecting operational realities and capability gaps identified at unit and sub-unit levels. The depth and detail of the suggestions that are made give a strong impression that opinions were genuinely canvassed and accepted from across the brigade. Processes of change frequently ran parallel to each other and were organic and evolutionary, as has already been seen. What the documents from July to December 1944 show is an effort by Brigade HQ to both harness and codify the new tactical methods and unit/formation organisations that were developing, and, later, to attempt to share these more widely. This section has shown that serious and professional thought was being put into the processes of adaption, emulation and innovation within 4th Armoured Brigade from the late summer of 1944 onwards. The process that led to this had begun under John Currie's command with strong efforts to inculcate greater professionalism, to learn lessons, and to reinforce the brigade's training regime. However, the arrival of Michael Carver catalysed this into a process that was both more vigorous, in terms of pace and drive, and more rigorous, in terms of intellectual effort. The manner in which the brigade organised itself for the offensive operations tasked by corps commanders underwent changes as a result of these processes, and this was critical for fighting effectiveness.

⁵⁷ 'Composition', p. 2. 'A small RE unit' required, the context implies, probably only a platoon. It says it would be used for specialist tasks and to train those in the motor battalion and REME who are currently carrying out 'engineer' tasks.

⁵⁸ 'Composition', p. 4. The report argues that approximately 200 additional troops would be required.

Organising the brigade

The fighting in Western Germany in March and April 1945 demonstrates how methods developed by the brigade in Italy, France and the Low Countries had been perfected. The way the brigade organised for operations, the type of additional forces attached and the way these were integrated all developed and evolved over the period under consideration. By the spring of 1945, attacks were carried out in a fluid, fast-moving fashion with good co-ordination between infantry, armour and artillery. The two battle groups that the brigade generally split into operated divided into sub-groups, each with an infantry company/motor company and an armoured squadron, essentially the same model that armoured brigades had used with their motor battalions since at least 1942 only with the ratio of infantry to tanks substantially raised. Carver later stated that 'it convinced me that the organisation of the brigade into two battle groups, each of an armoured regiment and a mobile infantry battalion, was the best one for an armoured brigade'. 59 4th Armoured Brigade was not alone in using this system; Guards Armoured Division and 11th Armoured Division also employed nearidentical methods. 60 7th Armoured Division appears to have also adopted the model late in the war when under the command of Major General Lewis Lyne, 61 whom Forrester labels as an 'implementer' rather than an 'innovator'. 62 However, 4th Armoured Brigade certainly was amongst the first to adopt this organisation and it was one that was in far from universal use even at the end of the war, although it would go on to be the standard practice of the immediate post-war British Army.⁶³ Crucially, this model for operations emerges during the Normandy break-out and was refined repeatedly thereafter, and this process was, in contrast to many others discussed here, strikingly well documented.

⁵⁹ Carver, p. 216.

⁶⁰ Forrester, 'Montgomery and his Legions' and John Buckley in WW2TV (YouTube channel) *British Armour in Normandy, July-August 1944*, first shown August 21st, 2022.

⁶¹ As detailed in the war diary, WO 171/4171, but also summarised later in the report 'Reorganisation of an Armoured Division' (May 1945) within the 1945 war diary, which makes very similar points to Carver's 'Composition of an Armoured Brigade', written almost six months earlier.

⁶² Forrester, p. 146.

⁶³ G. Watson, R. Rinaldi, *The British Army in Germany: An Organisational History 1947-2004* (Unknown: Tiger Lilly Publications, 2005).

The development of these sorts of mixed battle group^s within the formation had a surprisingly lengthy genesis. In Italy, during the early part of the mainland campaign, the brigade was strongly reinforced with additional armour, infantry and artillery plus elements from 56 RECCE. This made the brigade a roughly division strength formation, designated 4th Armoured Brigade Group, for a few weeks. Between approximately the 25th of September and the 28th of October, the reinforced brigade operated as two battle groups, referred to as Baker Force and Cameron Force after the officers leading each battle group. 64 The war diary and subsequent report, '4th Armoured Brigade in Italy',65 both refer to Baker and Cameron Forces as 'columns'. This, of course, is reminiscent of the Jock Columns that were an important element of the British tactical methods in North Africa in 1941 and 1942. These were fast-moving, fully motorised all-arms groups usually of about battalion strength. They enjoyed some success in disrupting Italo-German supply lines and harassing and reconnoitring enemy forces but their effectiveness was clearly limited. Whilst capable in raiding and reconnaissance roles, Jock Columns were too small and lacking in the punch of armour and heavier artillery and thus suffered badly when deployed in conventional operations. These weaknesses were understood by the British at the time and the subsequent historiography has largely highlighted Jock Columns as an example of poor tactical doctrine and resource allocation.⁶⁶ However, the columns used in Italy were far larger and more robustly constructed, owing more to the greater concentration of forces that Montgomery championed. Furthermore, in Italy, the two columns' operations were closely coordinated by brigade HQ and resembled the use of Montgomery's 'alternating thrusts' in offensives more than they did the piratical operations of most Jock Columns. They also had genuine all-arm representation as the brigade group contained artillery, infantry, armour and engineers.⁶⁸

⁶⁴ Lt. Col. Sandy Cameron of 3 CLY and Lt. Col. Baker, 17 Field Regiment.

⁶⁵ '4th Armoured Brigade in Italy', copies in GREYS papers, RSDG Museum, Edinburgh and WO169/8861 TNA, Kew.

⁶⁶ Colvin, Eighth Army versus Rommel, pp. 128-29, 205. French, Churchill's Army, pp. 215-16.

⁶⁷ Hart, pp. 10, 96-98.

⁶⁸ Four armoured regiments, two infantry battalions, an artillery regiment, a Royal Engineers squadron and most of 56 RECCE with the brigade's usual LFA, RASC and REME elements in addition. WO 169/8861, TNA, Kew.

The period that Baker Force and Cameron Force operated for was brief, and nothing similar occurred again in Italy. Nonetheless, the document '4th Armoured Brigade in Italy' spends several pages assessing the work of the two columns. A key finding was that it was 'abundantly clear that "ad hoc" formations require a little time to settle down and get to know each other'.⁶⁹ The report further states that cooperation and performance improved sharply over the period. The brigade group was seen to have operated effectively; it played important roles in the capture of both Foggia and Termoli.⁷⁰ In retrospect, the assessments made by the brigade appear valid.

The fighting at Termoli (October 4th–6th) was particularly fierce and included one of the few uses of massed German tanks the brigade encountered in Italy during a ferocious counterattack from *16*. *Panzer-Division*.⁷¹ The German assault was aimed at preventing the two brigades from 78th Infantry Division (11th and 36th) advancing from the south to relieve the weakly held beachhead. Despite significant casualties, the brigade group and 11th and 36th Infantry Brigade smashed the counterattack comprehensively. The war diaries of *16*. *Panzer-Division* have survived almost intact, and the accounts of the battle provide some fascinating details.⁷² The division sustained 56 killed and 246 wounded in the fighting.⁷³ They also claim to have destroyed or captured 18 enemy tanks and taken 88 prisoners. Interestingly, they failed to identify 4th Armoured Brigade as one of the formations involved until the fighting in Termoli was almost over.⁷⁴ By contrast, the brigade's intelligence briefing at the start of the operation is clear that *16*. *Panzer-Division* is the counterattacking formation.⁷⁵ The Germans give no figure for their own tanks that are knocked out,

⁶⁹ '4th Armoured Brigade in Italy', p. 5. Papers of GREYS, RSDG Museum, Edinburgh.

⁷⁰ Termoli, a town with a small port, had been captured intact by an amphibious *coup de main* operation using British commandoes on October 3rd. termoli [retrieved February 20th 2023].

⁷¹ In addition to the Panzer Division, elements of *1. Fallschirmjäger-Division* were already in the vicinity of Termoli.

⁷² 16. Panzer-Division war diary, Italy Sep-Nov 43, T-315, Roll 682, NARA.

⁷³ Report to LXXVI corps HQ on the Termoli fighting, dated 8th October 1943, T-315, Roll 682, NARA.

⁷⁴ See various *Tagesmeldung* (Daily Reports) and situation maps for October in T-315, Roll 682, NARA.

⁷⁵ This is likely because 56 RECCE, attached to the brigade, had captured a motorcyclist from 16th Panzer who appears to have been at the very front of the formation whilst en route to Termoli. Doherty, *Eighth Army*

but 3 CLY, the brigade's main unit involved, claimed to have knocked out six German tanks⁷⁶ and killed 'scores'⁷⁷ of *Panzergenadiere*.

The counterattack failed and the commander of *16. Panzer-Division* was replaced shortly afterwards. The division's own account of the operation strikes a distinctly defensive note.⁷⁸ The formation was subsequently criticised for the slow move up to Termoli and the failure to concentrate its units during this. The report repeatedly cites poor weather and difficult roads, but obviously the brigade group and 11th and 36th Brigades faced exactly the same issues.

The operations in Italy in October and November continued at a rapid pace for the brigade group and, thereafter, 4th Armoured Brigade. Shortly after Termoli there were the contested crossings of the rivers Trigno and Sinello; these took place on consecutive days. The Sinello operation also involved a minor battle at the small town of Scerni which mainly involved 44 RTR and 2 KRRC. The Sangro battle was nonetheless the largest and most protracted operation the brigade undertook in Italy. '4th Armoured Brigade in Italy' followed the narrative account of operations, with several pages of 'lessons learnt'.

The brigade's report on the fighting in Italy addresses several points that are also raised in Carver's 'Composition of an Armoured Brigade', written over a year later: The brigade group needed substantially more infantry and it was 'impossible to have too many RE' (Royal Engineers).⁷⁹ The emphasis on joint training and planning was likewise made. However, the brigade was not in a

in Italy, p.17. The brigade intelligence summary dated 14th October (in WO 169/8861) gives a surprisingly accurate and detailed picture of *16. Panzer-Division* that largely ties in with the division's own records.

⁷⁶ Figure from 3 CLY war diary WO 169/9332 and Brigade HQ war diary WO 169/8861, TNA, Kew.

⁷⁷ Delaforce, *Monty's Marauders* p. 67, '4th Armoured Brigade in Italy' simply says 'many', RSDG Museum, Edinburgh. Given that the tanks were at the forefront of attempts to break the counterattack, it is feasible that a significant proportion of the 16th Division's casualties were inflicted by them.

⁷⁸ Gefechtsbericht (Battle Report) dated October 13th. T-315, Roll 682, NARA.

⁷⁹ '4th Armoured Brigade in Italy', p. 6. Papers of GREYS, RSDG Museum, Edinburgh

position to deploy in this format again for some time; indeed, the role initially proposed for it in Normandy, prior to D-Day, was very different. It was to be permanently attached to 51st (Highland) Infantry Division. Nonetheless, the brigade HQ in Normandy contained a number of officers who had planned and taken part in the brigade group operations in Italy, and many of these survived Michael Carver's axe. These included the IO, Captain Scott, the Staff Captain, Captain Thwaites, Major Pollard, the BRASCO,⁸⁰ and Captains McLennan and Wightmore, who had changed roles but remained within the brigade HQ.⁸¹ Additionally, there were a number of officers within 2 KRRC, 44 RTR and 3 CLY who had also been involved. There would unquestionably have been an organisational memory provided by these officers. Once more, the value of continuity can be seen. When the situation in Normandy began to change significantly and offer new opportunities, the all-arm battle groups began to emerge once more.

The first mention of the structure appears during the Falaise fighting in August 1944⁸² when the brigade was working alongside 53rd (Welsh) Infantry Division. At this point, 71st Brigade from that division was loaned to 4th Armoured with the 'grudging' agreement of General Ross according to Carver's later account.⁸³ However, this was a short-lived arrangement, and for much of August and September the brigade was frequently, as earlier in Normandy, broken up into smaller detachments for multiple tasks, often with more than one division. The brigade was frequently working with units detached and generally under the control of other commanders, so there were only limited options for innovation. Nonetheless, the arrangements made in August were seen to have worked and vindicated the ideas which had already been put forward in the Brigade Training Memorandum in July 1944;⁸⁴ the perception that the arrangements were successful is confirmed by the uniformly positive responses to the structure in the war diaries of all the brigade's units. Following the slower-paced actions of late 1944, from January 1945 onwards, the brigade spent considerably more time

⁸⁰ Brigade Royal Army Service Corps Officer, the officer responsible for logistical transport.

⁸¹ Various nominal rolls of officers in WO 169/8861 and WO 171/601.

⁸² WO 17/601, 4th Armd Bde HQ, August. TNA, Kew.

⁸³ Carver, Out of Step. pp.196-97.

⁸⁴ 'Brigade Training Memorandum No.2' (July 1944), 4th Armoured Brigade Papers, Tank Museum, Bovington.

deployed as a cohesive whole with other elements attached. This varied between single infantry battalions on loan to the brigade through to entire infantry brigades and on occasion additional armoured and artillery assets, allowing the brigade to become, once more, a de facto division for several short periods. One veteran made this specific point when referring to the entire period after Normandy, saying "4th Armoured Brigade seemed to be used almost as a division...", and he reiterates that the commanders of the corps within 21st Army Group seemed to use the brigade like a division, adding it was sent "wherever armour was needed".85 During these periods, the brigade was frequently tasked directly by the relevant corps. There are of course clear similarities with the way that German Kampfgruppen were constructed (at least ideally),86 and the idea of learning via the emulation of enemy methods is well established, as already discussed. It is also perhaps relevant that Michael Carver spoke German fairly well, had visited Germany twice in the 1930s87 and appears to have taken a closer interest than many peers in the Wehrmacht's organisation and methods.

In terms of the development and effectiveness of these organisational changes, Forrester singles out the time in early March 1945 when the brigade was attached to 11th Armoured Division, another of those identified by him as an 'innovator' formation receiving particular consideration in his thesis. ⁸⁸ This is certainly an important phase and one worthy of examination here, but there were also several other intervals during early 1945 which offer some important insights. The operations in early March saw the brigade lose 3/4 CLY temporarily but gain 4th King's Shropshire Light Infantry and 15th/19th Hussars, the latter being an armoured reconnaissance regiment. The brigade then operated as two battle groups, each consisting of an infantry battalion (2 KRRC and 4 KSLI) and an armoured regiment (GREYS and 44 RTR), with 4 RHA and 15th/19th Hussars split between these. ⁸⁹

⁸⁵ Roy Griffis, (trooper, later a JNCO) GREYS, Reel 2, 23192, IWM Sound Archive.

⁸⁶ The term was used both for temporary ad hoc groupings often from understrength formations and for specifically tasked groups of units drawn from one or more formations. A detailed explanation can be found in Didden, 'Fighting Spirit', pp. 36-38.

⁸⁷ Carver, Out of Step pp.31-32 and p.44.

⁸⁸ Forrester, pp.142-43.

⁸⁹ WO 231/27, 4th Armoured Brigade HQ (1945), TNA, Kew.

The brigade then took part in the offensive operations that smashed through the German Schlieffen Line, ⁹⁰ and, as Forrester argues, this provided 'clear evidence of the nature of the techniques now being employed to overcome terrain and enemy', ⁹¹ and, importantly, these 'embodied new best practice'. ⁹² Forrester goes on to emphasise, rightly, the fast pace of operations during this period and the focus on night attacks and alternating thrusts. All of these, to degrees, were of course drawn from Montgomery's methodology, including his striving to retain the initiative and balance that has already been discussed. It can be clearly seen that the brigade had upped the tempo of its operations in comparison to those of 1943 and the early part of the Normandy campaign. Increasing reliance on improved W/T communications and procedures and the use of small, highly mobile Tac HQs which were kept well forward enabled a faster decision cycle, and this was part of a continuous process.

The ability to operate at a higher tempo was vital to the effectiveness of the new practices. It prevented German defences from solidifying around different positions once a defensive line had been broken and prevented, or at least disrupted, enemy forces from regrouping and being reinforced. The approach was thus, in many respects, the heir of the German's Blitzkrieg of 1940, which had relied largely on a high tempo of operations to maintain the initiative and disrupt enemy attempts to respond.⁹³ From the late summer of 1944 onwards, the operations of infantry, armour and artillery were more tightly integrated through improved planning and briefing and these more capable forward HQs. Operations were now frequently carried out at night, making use of a variety of improvised illumination schemes and further upping pace, momentum and the shock effect.

⁹⁰ A German defensive line in north-west Germany. It sometimes appears in British war diaries as the Schliessen Line. German sources refer to it as the *Schlieffen-Stellung*.

⁹¹ Forrester p.142.

⁹² Forrester, ibid.

⁹³ For examinations of this method see Edward Luttwak, 'The Operational Level of War' in *International Security*, Winter, (1980-1981), Vol. 5, No. 3 pp. 61-79 and Lloyd Clark, *Blitzkrieg: Myth, Reality, and Hitler's Lightning War: France 1940* (London: Atlantic Books, 2016), pp. 409-413 (Kindle edition).

In April 1945, the brigade was arguably freer to act and had refined its methods still further during the fighting along the river Aller. Here, Carver was in a position to use his entire brigade with added infantry from 53rd Infantry Division, this time 6 RWF, as an independent formation. This culminated in the fighting on the approach to Bremen, with the largest battle taking place at Verden. In Out of Step, Michael Carver described the Verden fighting thus: 'It had been a most successful battle, a model of its kind, in which we had been able to combine mobility and firepower more effectively than at any time since we crossed the Somme. 94 The impact of the operation was summarised in one post-war account as a 'successful manoeuvre With 4th Armoured to the north of the Corps' axis, the way was now clear for 7th Armoured Division to breakout.'95 Casualties had been relatively light across the brigade: 15 killed and 62 wounded, despite some heavy fighting. 96 The brigade lost less than ten tanks during the period.⁹⁷ In the course of the operation, the brigade and 53rd Infantry Division shattered 2. Marine-Infanterie-Division, took around 2,000 prisoners and destroyed or captured over thirty pieces of medium and heavy artillery. More importantly, the operation had helped open up the approaches to both Bremen and Hamburg. Whilst this took place against the backdrop of an inevitable German defeat and the collapse of the Wehrmacht, it must not be forgotten that the NS Government had managed to mobilise strong resistance in many areas through a mixture of brutal enforcement and powerful propaganda.⁹⁸ The Verden area was one such location, identified as important to the defence of the region, fortified and garrisoned with effective units. The Marine Divisions⁹⁹ were recruited from *Kriegsmarine* personnel largely drawn from the crews of surface ships and naval shore installations, one of the last pools of fairly fit and motivated men of military age available to the Wehrmacht. They were given a shortened version of infantry training (in common with all other recruits at this time), but unlike many of these other 'emergency' units, the Marine Divisions acquired a reputation for both military skill and tenaciousness. Indeed,

⁹⁴ Carver, p. 216.

⁹⁵ Russell. p. 211.

⁹⁶ 'Operations East of the Aller', Papers of FM Lord Carver, IWM.

⁹⁷ Possibly as few as four, though the records are confusing around this.

⁹⁸ For a disturbing, forensic account of how this was achieved, see Ian Kershaw, *The End* (London: Penguin, 2012).

⁹⁹ See Russell, *No Triumphant Procession*, Chapters 1-2 and Bernd Bölscher, *Hitlers Marine im Landkriegseinsatz 1939-45* (Norderstedt, Germany: BOD, 2015).

accounts from 4th Armoured Brigade soldiers have labelled 2. Marine-Infanterie-Division as 'determined fighters'100 and a formation 'who fought hard and skilfully'.101 The division was commanded by the experienced and highly decorated Kapitän zur See Werner Hartmann. 102 Such situations could inflict reverses on the Allied forces, albeit ones of a localised and temporary nature. On both the Eastern and the Western Fronts, German successes occurred into the final weeks of the war, for instance at Bautzen¹⁰³ on the Eastern Front in April 1945 and at Ibbenbüren¹⁰⁴ in the west in March. The British still sustained significant casualties in a number of the operations during this final phase of the war even with the near total absence of German airpower and limited fuel for their AFVs. As part of the otherwise successful Operation HEATHER, 1st Battalion South Lancashire Regiment suffered 30 killed (including two company commanders) and 40 wounded on the 27th of February alone. 105 The fighting at Verden could have played out along similar lines. During Op HEATHER (an offensive in the Goch area), the German defenders successfully separated the supporting tanks from 1 S LANCS (whose infantry were engaged by multiple well-concealed LMGs)¹⁰⁶ and were able to pick them off at close quarters using *Panzerfauste* and demolition charges.¹⁰⁷ These were not new tactics and the Wehrmacht used similar methods in Normandy;¹⁰⁸ in fact, this tactical approach had already been highlighted in the April 1944 British training pamphlet Tactics of the German Army: Defence and Withdrawal, 109 and much of the basis of the observed tactics is set out clearly in the German Army's training pamphlet Richtlinien für Panzernahbëkampfung (October 1942). 110 4th Armoured Brigade was able to deal effectively with similar threats at Verden as they had been anticipated and planned for. Using tactics developed in

¹⁰⁰ Wake and Deedes, p. 332.

¹⁰¹ Carver, p. 215.

¹⁰² Bölscher, *Hitlers Marine im Landkriegseinsatz* pp.180-81. Hartmann's career included commanding a Uboat, a combat diving detachment and a Volkssturm region and he'd been awarded the Knights Cross, subsequently with oak leaves. He had only taken over shortly before the battle.

¹⁰³ On Bautzen, Wolfgang Fleischer, *Das Kriegsende in Sachsen 1945* (Egglesheim, Germany: Dörfler Verlag, 2004).

¹⁰⁴ On Ibbenbüren, John Russell, *No Triumphant Procession*, pp. 24-6.

¹⁰⁵ WO 171/5227 War Diary 1 S LANCS. TNA, Kew.

¹⁰⁶ WO 171/5227.

¹⁰⁷ For a detailed account of this action see Tony Colvin. *The Noise of Battle*, pp. 52-133.

¹⁰⁸ John Buckley, *British Armour in the Normandy Campaign* p. 87-88.

¹⁰⁹ Tactics of the German Army: Defence and Withdrawal (London: War Office, April 1944).

¹¹⁰ Richtlinien für Panzernahbëkampfung (Guidelines for Close Quarters Anti-Tank Fighting) October 1942, OKH, 469/4.

the preceding months, the infantry were kept close to the armour by moving them in Kangaroos (armoured personnel carriers) until the last possible moment, and both these and the armour vigorously machine-gunned likely ambush spots as they moved forward.¹¹¹ Speed and maintaining momentum were critical parts of the method.¹¹² Robin Dunn, an officer with 4 RHA, recalled how much faster the brigade's operations became during 1945 and that he saw more 'calculated risk and initiative' than before.¹¹³ The tactical situation in this period and the brigade's response were obviously identified as offering wider value as an example of best practice, which is reflected in the fact that, in August 1946, 4th Armoured Brigade and 5th Infantry Division officers participated in a large-scale TEWT over two days based on the battles of April 1945.¹¹⁴

The Kangaroos, which played a prominent role in these operations, were a new tactical option, first appearing in late 1944. They were turretless Canadian Ram tanks (a version of the Sherman). They were not controlled at brigade or divisional level but held in separate transport regiments at army level. They gave the infantry greater mobility and protection and were seen to be substantially superior to the 'International' half-tracks used by the motor battalions. However, they were not always available and the limited numbers were subject to conflicting demands and bids. The brigade's success in obtaining them frequently is notable. However, the period also saw the brigade moving infantry forward mounted on its tanks. The concept of tank riders, used extensively by the Red Army, was not well thought of in the British Army. Troops were seen as too vulnerable to enemy fire, exposed to the elements, and also likely to damage tanks or be injured falling from

¹¹¹ WO 171/4683 (GREYS 1945) report, 'Points from Operations of GREYS-KSLI Group, Feb.1945', TNA, Kew and Carver, p.215.

¹¹² 'Points from Operations of GREYS-KSLI Group', ibid.

¹¹³ Robin Dunn, Wig and Sword pp. 82-87.

¹¹⁴ Papers of Field Marshal Lord Carver, Box 1, Files 1-5, IWM.

¹¹⁵ John R. Grodzinski, *"Kangaroos at War": the History of the 1st Canadian Armoured Personnel Carrier Regiment* (1995) in *Canadian Military History*, Volume 4, Issue 2.

¹¹⁶ Grodzinski, ibid.

¹¹⁷ These were US M9 half-tracks, referred to by many British units as Internationals because of the manufacturer's name, Harvester International, a term used by 2 KRRC in WO 171/1327. The superiority of the Kangaroo is referred to in 'Operations East of the Aller' p. 28.

them.¹¹⁸ Even so, the brigade was clearly happy to do this when speed and mobility called for it 3/4 CLY moved some of its attached infantry forward in this way at Uedem.¹¹⁹ Several days of training with the infantry preceded this. An attached report noted that a troop of tanks was sufficient to move an infantry platoon; by contrast however, a troop of Kangaroos would move an entire company.¹²⁰

It is important to highlight that the Verden fighting saw a confluence of favourable aspects that illustrate the impact of the critical influences discussed throughout this part of the thesis. One of those important elements was topographical; that is, after lengthy periods fighting over difficult terrain the brigade was once more operating on ground that was favourable to mechanised manoeuvre warfare. This thesis has returned repeatedly to the impact of terrain, vegetation and climate upon operations. The area of north-west Germany in question is largely flat or gently rolling, is well drained, and had, by contemporary standards, a good road network. As Michael Carver observed, 'tanks could move freely'. 121 Another factor was the other units involved. Despite previously arguing with 53rd Division's commander (Maj. Gen. Ross), a not particularly unusual occurrence given Carver's much noted lack of patience and combative style, Carver later stated that he was glad to be back with the Welsh, whom he regarded as better trained and led than many other infantry divisions the brigade had served with in 1944 and 1945. 122 Unproblematic topography and familiar, trusted units combined to allow the brigade to exploit its own tactical innovation. Another important influence that requires consideration when seeking an explanation of the brigade's successes in 1945 was the fact that the 'firepower gap' between British and German units, which exerted a powerful influence at the tactical level between 1940 and 1943, had been closed substantially and, in some areas, reversed by new equipment that had arrived throughout 1944. The mitigation or removal of this 'firepower gap' was a fundamental driving element within much of the tactical learning discussed here. Obviously, individual units or formations could not develop or

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¹¹⁸ Ellis, *Sharp End*, pp. 66-67.

¹¹⁹ WO 171/4697, entries in January and February and messages between RHQ and HQ 3rd Inf. Div.

¹²⁰ WO 171/4697, after-action report re Wanssum. Document produced by 8th Inf. Bde.

¹²¹ Carver, p.215.

¹²² Carver, ibid.

acquire new equipment, although they could and did make suggestions about what the army might need to purchase. The presence of effective AT weapons, principally 17pdrs mounted on Sherman Fireflies and self-propelled artillery vehicles and new, powerful support weapons such as the Wasp tracked flamethrower, did much to redress the advantages the Germans had enjoyed for most of the war.

By early 1945, the structure of the brigade and its battlegroups closely reflected the needs identified in the reports and in the letters in 1943 and 1944 which were produced within it. These mirrored many of the issues found across similar British formations, specifically a higher proportion of infantry to tanks, tracked mobility for that infantry, attached engineer elements and powerful AT guns mounted on tracked chassis. Naturally, this was the same across most of the British Army in this period, but formations needed to adapt to new equipment and learn how to maximise the advantages it bought. The speed and extent of this adaptive process varied across formations and even within them. Naturally, it is possible to propose a 'Brute Force' 124 style argument to explain all of 21st Army Group's successes at this point in the war.

21st Army Group faced a demoralised opponent with limited resources, and there were large numbers of new, greatly improved vehicles and weapons for the Allies, but that position fails to account for a number of elements that were critical at the tactical level. As discussed, the Wehrmacht was highly capable on the defensive and, even late in the war, it could inflict reverses on the Allies and frequently made inevitable victories nonetheless costly. One notable factor in war diaries, letters and other unit- or lower-level accounts that is largely missing from the historiography is the continued presence of the Luftwaffe. This has also been commented on by L.P. Devine, who

¹²³ For instance, 'Composition of an Armoured Brigade' in WO 171/601 War Diary of 4th Armoured Brigade HQ (1944). Also, 'Lessons from Operation Jupiter', 4th Armoured Brigade Papers, Tank Museum, Bovington. ¹²⁴ A phrase derived from the title by the influential John Ellis, *Brute Force*, discussed in the introduction; this has now become shorthand for *materialschlacht* approaches to the war.

suggests this requires further study.¹²⁵ Whilst generally small scale and almost always at night, air raids were not infrequent during 1944. 5 RASC recorded ammunition dumps being hit on both 17th July and 17th August, and casualties were sustained and vehicles destroyed during both incidents.¹²⁶ The targeting seems to suggest that the Luftwaffe were receiving good intelligence. Indeed, as late as December 1944, 2 KRRC record being attacked, although ineffectually, by low flying German aircraft, surprisingly, in daylight.¹²⁷ However, the presence of the Luftwaffe did not have a major impact even if its incidence appears to have been under-reported. Other areas had a more profound effect.

Fundamental German tactical advantages related to weapon systems, and AFVs still remained in some areas. Many German tanks and SP guns were either better armoured or better armed, and indeed sometimes both, than most of their Anglo-American counterparts until almost the end of the war.

128 Indeed, this fact and the presence of numerous handheld anti-tank weapons amongst German troops such as the Panzerfaust and Panzerschreck, along with the 88mm gun (an older nemesis of British armour), meant that British tank crews felt vulnerable. This is very well attested in contemporary letters, diaries and reports, even though the much-feared Tigers and 88s were considerably less common than assumed.

129

A variety of local solutions were proposed during 1944 to address this in 4th Armoured Brigade, as was the case in many other formations. It was quite common for armoured regiments to place sandbags, spare track or even ammunition boxes filled with earth on the outsides of their tanks to help defeat AT munitions, 3/4 CLY went much further, and, in cooperation with the brigade's REME workshop, they trialled spaced armour plate (designed to defeat HEAT rounds) made from

¹²⁵ L.P. Devine, location 3969-3981.

¹²⁶ 5 RASC war diary, WO171/2346, TNA, Kew.

¹²⁷ WO 171/1327, TNA, Kew.

¹²⁸ Niklas Zetterling, *Normandy 1944* (Oxford: Casemate, 2019) p.52 and p.88.

¹²⁹ Buckley, British Armour in Normandy pp.124-26 and Kite, Stout Hearts pp.360-71.

battlefield scrap on several Shermans from autumn 1944 to early spring 1945.¹³⁰ This never spread to the other armoured regiments and was abandoned 3/4 CLY before the war's end, but it is nonetheless indicative of a problem-solving attitude within the brigade and a professional approach to this, including a willingness to admit something wasn't working. It was not only armour and AT weapons that saw a continued firepower gap; additionally, most German infantry battalions still had significantly more, and arguably better, LMGs than their British equivalents.¹³¹ When one factors in the looming and inevitable end of the war, from an Allied point of view, this became problematic, as the final part of this work will show.

Motivating British troops to press home attacks against fanatical resistance when the 'war was going to end soon anyway' was difficult. 132 Not all British formations performed in the same way and some clearly struggled in this 'last leg'. 133 4th Armoured Brigade in this period was able to achieve all of its tasked objectives, 134 one of this thesis's fighting effectiveness criteria, and this was achieved with comparatively light casualties, meeting another of the fighting effectiveness criteria. It is notable that Carver describes one of his many intemperate exchanges with Lieutenant-General Brian Horrocks as stemming from this last issue. In April 1945 Horrocks asked him about casualties and progress; when Carver provided the casualty figures, Horrocks scoffed that they clearly weren't trying very hard as 8th Armoured Brigade (which was operating nearby) had suffered significantly more. Carver replied, 'Sir, I reckon my success by the casualties we inflict on the enemy, not by those he inflicts on us'. 135 Of course, this appears in an autobiography written nearly forty years after the event and

¹³⁰ As evidenced in the photograph collection of Jimmy Sale, National Army Museum, in several series of photos but see particularly those in NAM 1975-03-63. Also referred to in passing in WO 205/1165, 'A Survey of Casualties Amongst Armoured Units in N.W. Europe' (1946), TNA, Kew. Also mentioned by Anthony Bashford, Reel 2,12907, IWM Sound Archive. Bashford is not sure about dates but implies that the experiment may have started earlier, as he left 3 CLY for 44 RTR in early August.

¹³¹ See the various establishments for German infantry battalions as at late 1944 on www.bayonetstrength.uk.

¹³² On attitudes to this see Alan Allport, *Browned Off and Bloody Minded* pp.196-97.

¹³³ On concerns raised within 53rd infantry Division see Russell, *No Triumphant Procession*, pp. 65-66.

¹³⁴ An examination of WO 171/4314 (Bde HQ 1945) shows that the brigade was tasked to five major operations between March and May 1945 and was able to achieve all the objectives from the op orders for each.

¹³⁵ Carver, p.216. Lord Bramall stated that he'd heard this story at the time, though not in person, in his interview with the researcher.

caution should be exercised, but the exchange was clearly witnessed by a number of other officers, many of whom were still alive at the time of *Out of Step*'s publication. In addition, the relative casualties are a matter of public record, ¹³⁶ so it is likely that what occurred was not radically different. ¹³⁷ Carver's brigade was not taking heavy casualties because it was adapting and innovating effectively in the face of enemy tactics.

Part Two Conclusion

As these chapters have established, across the British Army as a whole, tactical innovation and adaption took place in a haphazard and uneven manner. Indeed, it can be seen that even within 4th Armoured Brigade, the development of these areas was not uniform or always well organised. Processes were frequently ad hoc and largely verbal. However, it can also be very clearly seen that the brigade was one of a minority of formations that actively and consistently sought to develop new methods, to refine them and, to a lesser degree admittedly, to transmit these to the rest of the army.

The increased professionalism and focus created by John Currie created a fertile ground upon which Michael Carver's deeper and more system-orientated approaches could grow. Carver's deliberate efforts to canvass widely for new ideas enabled a stronger and bolder process of adaption, emulation and innovation. These efforts also fostered team spirit and contributed to the strength of both the loyalty/identity structure and the functional structure with their emphasis, as Kirke argues, on 'being the best'. Michael Carver participated in a lengthy correspondence with Basil Liddell Hart post-war, and early on, they argued about lesson learning and tactics during the recent conflict. Carver stated that 'we learnt our lessons and applied them better than the Germans

¹³⁶ See WO 285/13, TNA, Kew. 8th suffered slightly higher casualties than 4th between D-Day and the German surrender: 1,657 were killed or wounded as opposed to 1,254.

¹³⁷ It is notable that Horrocks clearly continued to bear a grudge later: his autobiographical account of the campaign, *Corps Commander*, contains not *one* mention of 4th Armoured Brigade; 8th Armoured Brigade has nine.

did'.¹³⁸ As the introduction to this thesis demonstrated, that idea still remains controversial and contested.

The development of, and increasing reliance on, new tactical methods can be seen to gather momentum between 1943 and the end of the war. Crucially, through the impact of these processes, the brigade's fighting effectiveness was significantly enhanced via a series of organisational/structural modifications that maximised the efficacy of new weapon systems and allowed flexible operations with a faster tempo. The much-improved ability to deliver infantry—armour cooperation was important; it was developed, as shown, through joint training and clear, widely circulated planning. Working within the organisational structures imposed, which necessarily limited the brigade's freedom to act, the leadership of 4th Armoured Brigade demonstrate that the centralised control within 21st Army Group was significantly less restrictive than is often portrayed. The brigade was able to fight, learn and adapt.

This combination was able to frequently deliver victories at a relatively low cost, and this reflects key elements of the fighting effectiveness measurements used in this thesis, specifically the ability to achieve tasks allocated where they are achievable, the ability to remain functional beyond these tasks by avoiding heavy losses in personnel or equipment and, finally, the ability to learn lessons and produce improved performance via these. Therefore, it is clear that 4th Armoured Brigade's fighting effectiveness was sustained and increased by the processes discussed in part two.

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¹³⁸ Papers of FM Lord Carver, IWM. Letter from Liddell Hart to Carver (dated 27th of February 1950) wherein he quotes several points from Carver's preceding letter and addresses them. The original letter is not held in Carver's papers but the comment aligns with his views.

Part 3. 'Unless we have an army willing to fight, we shall not win this war'*: The role of morale and motivation

^{*}General Harold Alexander, Report on Army Morale dated May 1944. WO 214/64 TNA, Kew.

Chapter 1. Defining and Measuring Morale

Having considered the roles of leadership and tactical learning and methods, it is now necessary to move on to the function of morale as the last of the major factors within this assessment of 4th Armoured Brigade's fighting effectiveness. In considering this, the principal question addressed will be how one can assess the levels of morale across the brigade in this period, and there will be an examination of whether this factor actually enhanced, or indeed degraded, fighting effectiveness. The first chapter will, of necessity, also consider what is actually meant by both morale and motivation. The title of part three is drawn from a report on army morale written by an experienced senior officer just before the outset of the campaign in North-West Europe.¹ It illustrates the perceived centrality of morale issues in the British Army of the 1940s, a factor already alluded to several times in this thesis.

The first chapter of this third part of the thesis explores the key concepts and influences involved in morale. It will then address how the British Army approached this area during the Second World War. Finally, having set out the important ideas, the intellectual landscape of the time and the mechanisms available to measure and influence morale, in the second chapter, the brigade's performance will be scrutinised using six specific areas which will shed light on how morale and motivation worked in practice. These will allow conclusions to be drawn about how 'good', 'bad' or indeed 'indifferent' the brigade's morale was at various points. The influence of levels of morale and motivation will be linked directly to their impact on fighting effectiveness.

¹ Alexander, Army Morale.

It is of course abundantly clear that those factors, broadly referred to as morale, have been seen as important to military operations for centuries. Xenophon² and Vegetius³ clearly discussed morale, and the often-quoted Napoleonic aphorism 'the moral outweighs the material by three to one' demonstrates the growing understanding of the magnitude of morale factors in warfare in the late 18th century. This shows the enduring nature of some elements within warfare. Whilst the pace of operations and the technology involved changed immensely between the era of Napoleon and the Second World War, fundamental human reactions remained at both individual and group levels. These human factors still continue to have a critical influence on warfare. 5 However, defining morale has proved to be a complex and contested area. Carl von Clausewitz in his seminal work On War⁶ wrote extensively on morale and its undeniable importance, yet even his usually incisive writing became less clear cut when discussing the subject. His work remained ambiguous about the relationship between morale and motivation. There was still complexity and ambiguity when Lt. Col. J.H.A. Sparrow produced his monograph for the War Office in 1946,7 which remains the best overall summary of the British Army's official ideas and actions concerning morale during the Second World War. Sparrow identified the complexity of morale and noted how 'both the long and short-term factors operate simultaneously on the soldier'. 8 The importance of group cohesion, with its bonds of trust and loyalty, was strongly highlighted, but other factors were also given significance, notably 'confidence in leaders (in the unit and in High Command)', 9 the effectiveness and perceived fairness of administration and rules, particularly around supplies, and what he refers to as 'wider considerations'. 10 The last group covered political and social issues on a broad scale, including

² Godfrey Hutchinson, *Xenophon and the Art of Command* (2000) Greenhill Books, London.

³ Vegetius *De Re Militari* Book I. Retrieved from Digital Attic http://www.digitalattic.org/home/war/vegetius/ [December 9th 2022].

⁴ Quoted in, among other places, *Army Doctrine Publication AC 71940 – Land Warfare* p.2.10 and Steven Englund, *Napoleon: A Political Life* (2004) Harvard University Press, Cambridge (USA) p.105.

⁵ Jokull Johannsson, The Critical Role of Morale in Ukraine's Fight against the Russian Invasion, in Open Journal of Social Sciences, Vol.8 No.6, (2020).

⁶ Carl von Clausewitz, On War, pp. 46-59,150-57, 211-12,

⁷ Morale of the Army 1939-45. J.H.A Sparrow (1946) WO/277/16 TNA, Kew.

⁸ Sparrow, p. 4.

⁹ Sparrow, p. 5.

¹⁰ Sparrow, p. 5.

ideas about the justness of the war, fairness in society and feelings about how and why soldiers were used.

Morale as a concept is thus both broad and complicated. Superficially, it is widely understood and treated in popular culture and business as having a straightforward meaning: essentially a sense of wellbeing or even happiness. Studies of the subject (both academic and military) dating back more than a century have repeatedly and convincingly shown that the reality is far more nuanced. Like leadership, examined earlier, morale is a quicksilver property of organisations. It is hard to both define and measure, and, as this chapter will show, it is closely entwined with leadership in other ways as well.

In the immediate post–Second World War period, a number of influential studies considered the fundamental factors which comprised morale. S.L.A. Marshall's *Men Against Fire*¹² examined combat motivation in the US Army, Samuel Stouffer's work on morale and social structures also looked at the US Army¹³ and Edward Shils and Morris Janowitz produced a study of combat motivation and morale in the Wehrmacht.¹⁴ All were carried out at the behest of the US Government in the decade following the war and have been described as 'the "Big Three' of combat motivation'.¹⁵ All three studies placed primary groups at the centre of cohesion and morale. Broadly, they all argued as follows:

Men fight because they belong to a group that fights. They fight for their friends, their 'buddies'. They fight because they have been trained to fight, and because failure to

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¹¹ For a discussion of this see Daniel Ussishkin, *Morale, A Modern British History* (Oxford: OUP, 2017), throughout but particularly Chapters 1, 2 and 4, and Christopher Petersen and others, 'Group Well-Being: Morale from a Positive Psychology Perspective' in *Applied Psychology* Volume 57 (July 2008).

¹² S.L.A. Marshall. *Men Against Fire*.

¹³ Samuel Stouffer *The American Soldier* (Princeton NJ: Princeton University Press, 1949).

¹⁴ Edward Shils and Morris Janowitz, 'Cohesion and Disintegration in the Wehrmacht in World War II' in *The Public Opinion Quarterly* Vol. 12, No. 2 (Summer, 1948), pp. 280-315.

¹⁵ Simon Wesseley 'Twentieth-Century Theories on Combat Motivation and Breakdown', p. 275.

do so endangers not just their own lives, but also those of the people immediately around them with whom they have formed powerful social bonds.¹⁶

In essence, 'the Big Three' express the understanding of combat motivation and group morale that emerged from the Anglo-American forces during the war; although all were produced in the US, their conclusions largely coincide with material produced in the UK towards the end of the war, such as Sparrow's.

A key text, from a British and twentieth-century perspective, in any examination of the issue of what morale is and how it functions within a military unit is John Baynes's *Morale: A Study of Men and Courage*, ¹⁷ first published in 1967. Baynes, who was an army officer himself at the time of writing, made an in-depth examination of a single British infantry battalion (in which his father had served) on the Western Front during 1915. He produced a work that was ground-breaking when it appeared. Baynes skilfully interwove psychological and sociological approaches into assessing morale, examining organisational factors such as training and administration as well as the inter-personal dynamics of the battalion. He defined morale as 'the way in which people react to the conditions of their existence'. ¹⁸ The book is now more than fifty years old and appears dated in many of its approaches and attitudes, but it nonetheless offers a number of valuable insights with two of particular use. The first is in the persuasively argued conclusions about how the 2nd Scottish Rifles maintained morale throughout the ferocious fighting and the second, lies in reflecting the 'conceptual architecture' of an army officer who had himself joined up just after the Second World War. His conclusions are close to Sparrow's and, like his, remain credible if somewhat simplistic:

First, I would place Regimental loyalty; the pride in belonging to a good battalion ... Second, the excellent officer-other rank relationship; the high quality of leaders and

¹⁶ Wesseley, p. 276.

¹⁷ John Baynes Morale: A Study of Men and Courage.

¹⁸ Baynes, p. 92.

the trust placed in them ... Third, strong discipline; the balance between self-discipline and the imposed sort. Fourth, the sense of duty of all ranks ... Fifth, sound administration; the battalion was well provided with ... rations and ammunition.¹⁹

However, research since the 1980s has increasingly created a more complex picture which reflects other social and cultural dynamics at work within morale and cohesion.

A recent study notes, 'Morale is used to describe individuals as well as groups, a complexity that poses an ongoing challenge in attempts by social scientists to study it.'²⁰ Not only is morale composed of the feelings and actions of both individuals and groups but it is also a product of a vast array of influences. The dynamics are complex, but as the same study has noted,

it is difficult to imagine a group with high morale in which only a few members are committed and confident. Most groups of sufficient size can sustain good morale with a handful of alienated or disgruntled members, but there is obviously a tipping point.²¹

Current British Army doctrine places morale within the 'moral component' of the three-fold model of fighting power (moral, physical and conceptual).²² In general terms, the moral component encompasses elements of fighting power related to the social and the psychological. Recently, Australian soldier and academic Sean Childs has offered another definition which makes salient points:

Broadly speaking, morale relates to confidence, enthusiasm and discipline at a given time. That is, the self-assurance to undertake a given task, the level of passion for

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¹⁹ Baynes, pp. 253-4.

²⁰ Christopher Petersen and others, 'Group Well-Being: Morale from a Positive Psychology Perspective' in *Applied Psychology* Volume 57 (July 2008) p. 21.

²¹ Petersen, p. 21.

²² Army Doctrine Publication AC 71940 – Land Warfare p.1A -1.

that task and the degree of will-power in relation to that task. When speaking of morale in the military setting, its attributes take on far greater meaning and relevance—for 'soldier morale' is a core element of military capability.²³

Morale can perhaps best be defined, for the purposes here, as that 'which holds the soldier, holds the unit, to the performance of duty despite every opposing force or influence, as Brigadier General James Ulio of the United States Army wrote in 1941.²⁴ That deceptively simple definition drawn from the 1940s strikes the right note and also hints at the multiple factors at work in morale and the linkage with motivation. This thesis considers morale to be a wide phenomenon comprising a number of interlinked and overlapping factors relating to the physical and psychological states of groups and individuals that make up these groups. These morale related factors comprise a variety of differing types that can be broadly divided into those components that influence the morale of a group and those which are the product of these influences, that is, the positive or negative outcomes of the influences. At their most simple, these can be viewed as 'inputs' and 'outputs'. The inputs are factors which have a direct physical and/or psychological impact on the group. The outputs in this model would be the changes to behaviour and performance caused by the input factors. This model is admittedly rather mechanical and this chapter will, of necessity, consider the issues in more detail and explore the complexity. Some factors will be shown to distinctly overlap and thus act as both inputs and outputs. However, the model is a helpful starting position, allowing demarcation of the factors that influence morale and offering insights into how morale can be measured. These two chapters examine the ways in which morale has an impact on the fighting effectiveness metrics used throughout this study and they consider its overall importance in relation to these. In particular, those elements of fighting effectiveness which pertain here are 'the ability to achieve tasks allocated where they are achievable' and 'the ability to maintain morale and motivation throughout these actions'. The ways in which morale helps to reinforce or undermine these are thus crucial. Naturally, the evidence available to explore this needs to be understood,

²³ Sean Childs, 'Soldier Morale: Defending a Core Military Capability' in *Security Challenges*, Vol. 12, No. 2 (2016), pp. 43-52.

²⁴ Brig. Gen. James Ulio, 'Military Morale' in *American Journal of Sociology*, Vol. 47, No. 3 (Nov. 1941).

including how morale was conceived and believed to work, and how attempts were made to measure it in the 1939–45 era.

Throughout the war, the British Army and government monitored morale through three key methods:²⁵ postal censorship reports (by far the largest data set used), questionnaires (mainly aimed at officers) and reports compiled by the Ministry of Information which drew on a wide range of sometimes rather unscientific sources including letters to the BBC. From March 1940 until the end of the war, these were summarised and disseminated in the monthly Morale Reports which provided a significant part of the Army and War Office's knowledge about the state of morale.²⁶ The army also recorded and paid much attention to levels of both desertion and absence as well as to some other serious military discipline offences, self-inflicted wounds and cases of mental breakdown, generally characterised in 1939–45 as battle exhaustion, which were all regarded as important indicators of troop morale.²⁷ None of these seem either implausible or inappropriate measures in retrospect, but as with leadership and organisational learning, an intervening seventy years of research has produced multiple new and more detailed explanations of how and why groups maintain morale under pressure.

Modern studies of military morale have highlighted a number of factors that appear to be important in the production and maintenance of troop morale and of course those which, inversely, help to degrade it. Hew Strachan cites primary group theory, ideological commitment, compulsion/discipline and training, concluding that the latter two are the most important.²⁸ Jonathan Fennell has argued

²⁵ Sparrow, *Morale of the Army*, WO/277/16 and French in 'Tommy is no Soldier' in *Journal of Strategic Studies* 19 (1996) pp.154-78.

²⁶ Daniel Ussishkin, *Morale, A Modern British History* pp.91-95 and Christine Bielecki, 'British Infantry Morale during the Italian Campaign, 1943-1945' pp.17-20.

²⁷ Jonathan Fennell, *Re-evaluating Combat Cohesion* in *Frontline* (2015) ed. Anthony King OUP, Oxford ²⁸ Hew Strachan, 'Training, Morale and Modern War' in *Journal of Contemporary History*, Vol. 41, No. 2 (Apr. 2006).

that maintaining motivation is key and that this can only be achieved via 'a desire to act' or through discipline. ²⁹ Fennell also states that the situation in the field or in the broader war will influence motivation. In a similar vein, Christine Bielecki contends that good leadership, success in battle, access to basic necessities and fairly administered leave were critical for British morale.³⁰ In considering how this study will approach the subject, it is important to consider these points; selfevidently, morale is, to a large degree, situational. This can be via the influence of factors such as limited food or bad weather, but the most powerful must be the progress of actual operations and the perception of these. A defeated army will have poorer morale than a victorious one, but that encompasses a wide scale of responses. These will be affected by the previous history of the army and the training it has undergone, and within that army, as this chapter will show, reactions can vary widely between individual units and even sub-units. Also, morale is boosted, or held up at least, by success. As commanders have known for centuries and Montgomery wrote during the war, 'high morale is possible in defeat but not in a long period of defeat ... success will aid good morale by creating confidence'.31 Importantly, motivation and morale have to be seen in combination. This is an essential point. A demoralised army might continue to fight relatively well because it remains strongly motivated. One thinks of many parts of the Wehrmacht in 1945. Here, motivation was a mix of desperation, fear and indoctrination, that is, fear of the enemy and the treatment that defeated soldiers (and indeed civilians) might receive at their hands but also fear of the punishments their own leaders could inflict on 'shirkers'. 32 Desperation was a product of these fears and was strengthened via propaganda. Once these motivations were removed or reduced, German units behaved like any other demoralised troops and surrendered quickly or melted away as deserters.³³

²⁹ Jonathan Fennell, *Combat and Morale in the North African Campaign* (2011) CUP, Cambridge (Kindle edition.) pp. 8-9.

³⁰ Christine Bielecki, 'British Infantry Morale during the Italian Campaign, 1943-1945'.

³¹ Bernard Montgomery, *Notes on Leadership, Morale and Discipline* (London: The Admiralty, 1958), which was based upon papers and lectures he produced during the war. Archive of RMA Sandhurst.

³² Refer to Ian Kershaw, *The End* pp. 218-21 and Richard J Evans, *The Third Reich at War* (London: Allen Lane, 2008) pp. 501-03.

³³ Kershaw, pp. 314-15 and Evans, pp. 682-83.

The story of attitudes to and the treatment of battle exhaustion cases offers a number of revealing insights relating to morale and motivation. It also demonstrates the unambiguous differences between the organisational cultures of the British and German Armies. In the 1920s, the Southborough Committee (War Office Committee on Shellshock)³⁴ reported on the factors around psychiatric breakdowns in the trenches and gave much thought to morale, concluding:

Morale is confidence in one's self and confidence in one's comrades. It is collective confidence, the spirit of a good team at football. Morale can be, and has to be, created. It is the product of continuous and enthusiastic training.³⁵

Attitudes to trauma-induced mental ill-health, conditions now broadly defined as post-traumatic stress disorder (PTSD),³⁶ were significantly different in the 1940s, but in turn, those attitudes were significantly different to those of the First World War.³⁷ The impact of that conflict and the large numbers of 'shell-shocked' troops was a major influence on the British Army's outlook in the 1940s. The army's policies on this evolved during the war; a mixture of pragmatism, changing social attitudes and advances in psychiatry drove the process. Battle exhaustion became a recognised condition and one which was typically given medical treatment, although generally with the aim of returning soldiers to their units as soon as practicable. Despite fears from some senior officers,³⁸ most cases were given rest, sedatives and food and only the worst recidivists faced military discipline.

In stark contrast, the Wehrmacht and the National Socialist government were in most respects far less sympathetic and supportive of emotional and psychiatric stress among the troops than the

³⁶ This is a complex area, and 'shell-shock' and battle exhaustion do not always map exactly onto PTSD. See Simon Wesseley, 'Twentieth-Century Theories on Combat Motivation and Breakdown' and Bielecki pp. 21-24. ³⁷ A point which Wesseley (ibid) makes, but see also Allport pp.249-53.

³⁴ Report of the War Office Committee of Enquiry into 'Shell-Shock' (London: HMSO, 1922). Digitised at <Wellcomelibrary.org.> [Retrieved 04/09/2018].

³⁵ Southborough Report, ibid.

³⁸ See, for example, Auchinleck in 1942 arguing for a return of the death penalty in WO 32/15773, TNA, Kew. His was not a fringe view.

Kaiser's government and army had been in the previous war.³⁹ Breakdowns in the morale of units or individual mental collapse were seen as failures of discipline or indicative of a lack of ideological zeal, and both were met with punishment, often of the harshest kind. 40 As David French pointed out, 'the German Army did not suffer the same incidence of recorded psychiatric breakdown as the British because ... [it] ... did not recognise such diseases'. 41 He goes on to argue that equivalent cases in the German forces were dealt with in one of two ways: either as discipline cases, which were often treated severely (the Wehrmacht retained the death penalty for a wide range of military offences), or as cases of physiological disease, with heart and stomach complaints being the most common. As disease casualties, these soldiers were able to receive rest and recuperation much as British battle exhaustion casualties did. A British survey of German prisoners of war found that most psychiatric casualties 'were masquerading under a diagnosis of organic disease'. 42 This situation is again an illustration of Kirke's idea of legitimate secondary adjustments, already encountered, and looks like a perfect example. 43 German medical staff must have been aware that they were misdiagnosing these cases or at least very much exaggerating existing physical ailments simply to get 'shell-shocked' men out of the frontline. Thus, German morale was held up by motivation, that is, the fear of punishment, and then 'papered over' by an informal system of effectively hiding battle exhaustion cases. This last point is of course a salutary lesson in the difficulties encountered in attempting to measure unit morale.

Having considered the policies of both Britain's army and Britain's government in the period in relation to morale and motivation, and the subsequent subject literature, this study will use six components signifying the main elements which have a direct effect on morale. The six have been

³⁹ Strachan, 'Training, Morale and Modern War'.

⁴⁰ Richtlinien, 14th July 1943, issued by *9. SS-Panzer-Division*, is clear that desertion, self-inflicted wounds and suicide are the result of 'criminal offences, reluctance to work ... as well as pathological hypersensitivity'. Although it does admit that 'wrong handling' (*falsche Behandlung*) by superiors or peers can cause problems, the assumption appears to be, only in those who are already flawed. p.17. T354, Roll 147, NARA.

⁴¹ French, *Churchill's Army* p.153.

⁴² WO177/316 TNA. Kew.

⁴³ Kirke, Red Coat, Green Machine, pp. 74-76.

derived from concepts that are strongly represented within the academic and military discourses regarding morale that were discussed above. However, these six have also been selected because several of them link directly to areas already discussed within this thesis as being critical to the performance of armies. Thus, they demonstrate the deep but messily complex inter-connectedness of the concepts discussed throughout. The factors are as follows; success in battle; group cohesion; provision of supplies; weather/terrain; actual and perceived enemy capabilities; and confidence in leaders. These are what can be termed the principal inputs. The next chapter will consider how each of these principal inputs affected the motivation and morale of 4th Armoured Brigade from the autumn of 1943 until the end of the war and how these influences in turn led to outputs which affected the brigade's operations, behaviour and culture. To gauge levels of morale and motivation, both statistical and qualitative methods will be used, focussed in turn on each of the six areas.

Measurements will consider levels of desertion and absence, so-called 'other sickness', self-inflicted wounds and other serious military discipline offences, and, finally, qualitative data will be drawn from contemporary and subsequent eyewitness accounts which discuss anything pertinent to group or individual morale.

This last group includes contemporary diary entries and letters, post-war memoirs and oral history interviews conducted at varying intervals after the war. This set offers a very large sample but also one with numerous possible drawbacks. Fading memories, a desire to present a favourable image or an unwillingness to criticise others are all potential flaws which other studies have raised.⁴⁴ A recent PhD thesis considering the usefulness of such recordings concluded:

In spite of the possible problems, it is clear that oral history can make a useful contribution to assessing the factors which influence morale. Studies of morale which

⁴⁴ With specific reference to the war, see Nigel de Lee, *Oral History and British Soldiers Experience of Battle in the Second World War* in *Time to Kill* Adison and Calder (eds). On issues generally, see Annmarie Turnbull, 'Collaboration and Censorship in the Oral History Interview' in *International Journal of Social Research Methodology* 3.1 (2000): 15-34.

have taken a more quantitative approach struggle to explain the psychological context of morale, whereas oral history's ability to elicit opinions about, for example, the reasons active service produced feelings of desensitisation towards death on both sides, demonstrate the value of personal evidence for achieving a well-rounded picture of morale.⁴⁵

The ability to engage with feelings and emotions, which after all are at the heart of morale, expressed by significant sample groups makes using these kinds of sources an invaluable part of any examination of morale as long as the cross-checking procedures already discussed elsewhere are adhered to. It seems likely that much of the material that is crucial to the understanding of morale at unit and sub-unit levels is buried within material that is often dismissed as anecdotal.

In terms of disciplinary matters, the principal offences that were used during the war to gauge good or poor morale were desertion, absence without leave, self-inflicted wounds, drunkenness and conduct prejudicial to military discipline. These all certainly appear to be offences indicative of a lack of discipline or cohesion within a group. Fortunately, these are recorded in some detail for 21st Army Group, including 4th Armoured Brigade, in the war diaries of the Deputy Judge Advocate General covering 1944 and 1945.⁴⁶ What these clearly show is that the brigade remained below the average for both infantry and armoured formations in terms of numbers court-martialled for the relevant offences throughout the campaign in North-West Europe. During July 1944, a period of intense operations and significant casualties for the brigade, it only had 3 convictions at court martial. By contrast, in the same month, 69th Brigade (in 50th Infantry Division) had 26 convictions.⁴⁷ In that month, a few formations of 21st Army Group actually have no convictions but most have several. Indeed, between 1944 and 1945 total monthly convictions for 4th Armoured never exceed 8 (October

⁴⁵ Thomas Cheetham, 'An Analysis of British Army Veterans' Oral Testimony and the Campaign in Northwest Europe, 1944-1945' (unpublished PhD thesis, University of Wolverhampton, 2019). ⁴⁶ WO 171/182 TNA. Kew.

⁴⁷ Buckley, *British Armour* p. 200 derived from WO/171/182.

1944); many brigades have dozens in some months.⁴⁸ 22nd Armoured Brigade, in many respects a peer of 4th Armoured Brigade, had 20 individuals court martialled in October 1944, two and a half times more cases. These were mostly for desertion and absence but included 7 cases of disobedience and insubordination.⁴⁹ As already noted, battle exhaustion and misconduct both peaked at, or shortly after, times of fierce fighting, and the outcomes and nature of that fighting will be areas that need close examination.

Morale is complex and relates to both groups and individuals, as this chapter has shown. Six main factors can be identified as having a direct influence on the morale of troops in wartime, and the next chapter will consider these and their varying impacts upon 4th Armoured Brigade. As discussed, diaries and letters, oral history interviews and sometimes even comments within war diaries will provide the texture and feeling where the brigade's morale is concerned, but robust statistical approaches based on measurable factors such as desertion/absence rates will also form an important part of the examination. How the six factors created outcomes, what these were and the relationship between inputs and outputs, which is not always straightforward, will all be examined in the next chapter.

⁴⁸ WO 171/182 TNA, Kew.

⁴⁹ WO 171/182 TNA, Kew.

Chapter 2. The Six Factors at Work in the Brigade

This chapter examines the six principal factors influencing formation and unit-level morale that were set out in the last chapter. They are not approached in any particular order as no factor is any more or less important. The key idea is that all work in conjunction with each other. Their effects overlap and can amplify one another. In addition, both individuals and groups are subject to all of the factors' effects but the outcomes of these will vary because they are influenced by both intrinsic and extrinsic influences on those groups and individuals.

Success in battle

The situational nature of the morale factors means that victory or defeat for a unit or formation will have a significant, and in some cases decisive, effect on the group's outlook and behaviour.

However, this covers a wide range of outcomes; losing or winning is not always clear cut and the group or individual's perception of the outcome can differ from those assessments made by higher commanders or even the enemy. An outright victory could still leave units depleted and unnerved. Combat was a frightening and disconcerting experience for most soldiers and was mentally and physically taxing even for the most hardened and resilient men. When considering the issues of morale and stress it is important to emphasise the conditions that the soldiers of both sides existed under between 1943 and 1945. Whilst academic studies such as this can make frequent reference to this factor, they often fail to convey the sense of horror and exhaustion that pervades so many of the veterans' accounts and contemporary diary entries. The campaign in North-West Europe and especially the combat in Normandy was the most intense fighting that the British Army engaged in during the Second World War, and many German accounts say that the fighting was as fierce as

that on the Eastern Front.¹ Sudden and terrible violence was a daily reality, and accounts seen and heard for this study reflect this. Fred Cooper recalled trying to help a friend get up after shelling and realising he was dead when a large organ ("I swear to this day it was his heart") fell out of the man.² Edwin Bramall recalled being in a group that dived under a half-track when German shelling started; a shell hit the half-track and he was the only survivor. ³ Ted Wood remembered the unnerving effect of the screaming of the seriously wounded.⁴

The primacy of the situational in shaping morale has already been shown, and it is important to remember that the enemy, in this period principally the German army, had agency and was able to act in ways that directly affected the morale of the brigade. The enemy will move into sharper focus later in this chapter. One significant point needs to be made here, however: despite some setbacks, the brigade never suffered an outright defeat in any major engagement during the period under consideration. In parts of the Sangro crossing (November 1943) and in Operation JUPITER (July 1944), the brigade was beaten back before reaching its objectives and suffered significant casualties. JUPITER in particular was not a tactical success for either the brigade or the British generally.⁵ The infantry of 43rd (Wessex) Division suffered heavy casualties, as did the armour of 31st Tank Brigade. 4th Armoured Brigade, although not deployed as intended, also suffered substantial casualties. July 10th was 2 KRRC's worst day in Normandy⁶ and all three armoured regiments lost tanks on both the 10th and the 11th. JUPITER achieved none of its goals, leaving the frontline in a near-identical position with the Germans still holding the high ground. However, it had

¹Sylvester Stadler, Combat report of the 9. SS-Panzer-Division "Hohenstaufen" (1947), original at NARA, reproduced in full at https://www.feldgrau.com/ww2-german-9th-ss-panzer-division-hohenstaufen-combat-report/, [retrieved January 10th, 2023]. Also, Tieke p.96 and WO 171/983, 94 Field Regiment war diary, appendix containing German POW debriefs, TNA, Kew.

² Fred Cooper, 21118, IWM Sound Archive.

³ Lord Bramall. Interview with the researcher.

⁴ Ted Wood. Interview with the researcher.

⁵ For a detailed account see Joe How, *Hill 112, Cornerstone of the Normandy Campaign* (Winnipeg: J.J. Fedorowicz, 2004), particularly Chapters 12-14. First published in 1984; Joe How was a veteran of the campaign who consulted widely with both British and German veterans and referred to unit war diaries whilst writing the

⁶ See WO171/1327, TNA, Kew. Also mentioned in interviews with both Lord Bramall and Ted Wood.

inflicted grievous casualties on 9. and 10. SS Panzer Divisions and prevented *Hohenstaufen* from being placed in reserve and rebuilt, further stalling German efforts to assemble forces for a major counterattack. This information was not immediately apparent to most soldiers in the brigade but it was widely circulated shortly afterwards as the intelligence summaries appended to the war diaries show.⁷ Although the operation is frequently referred to in veteran accounts from the brigade as a terrible two days where units were 'knocked out like ninepins',⁸ the brigade never fell back in disarray, as others certainly did,⁹ and was able to continue functioning effectively. Sandy Stowe, a platoon commander in 2 KRRC at the time, expresses intense pride in this in a later letter.¹⁰

There was, however, a corresponding rise in the number of battle exhaustion casualties immediately after JUPITER. The link between battle exhaustion cases and unit morale, as already discussed, was made at the time and has been credibly argued as one which remains valid.¹¹ During the period 7th–13th July, 2 KRRC had 5 cases of battle exhaustion.¹² Much higher figures are to be found among the 43rd Division battalions that were engaged in JUPITER. 5th Hampshires had 34 and 5th Duke of Cornwall's Light Infantry had 26, and the 8 Corps Medical Services report comments that 'the general morale of cases seen from 43 Div was low ... It was also apparent that ... not only had individual morale gone, but group morale as well.'¹³ 43rd Division, it should be remembered, suffered severe casualties during JUPITER and was in constant contact with the enemy for a protracted period. However, the division's morale appears to have recovered fairly

⁷ '4th Armoured Brigade Intelligence Summary' dated July 15th1944. Appended to most unit war diaries; see, for instance, WO171/601 (Brigade HQ), TNA, Kew.

⁸ Captain Callander, GREYS, quoted in Patrick Delaforce, *Monty's Marauders*, pp. 77-78.

⁹ Refer to Hastings, *Overlord* pp. 287-88 and 2 KRRC war diary for July 10th WO171/1327 (TNA); also, for an eyewitness account of one battalion's near rout, see John Majendie (4 SLI), Reel 3, 22925 IWM Sound Archive.

¹⁰ Sandy Stowe, letter to Toby Wake (September 1986). Wake had been his company's OC. The letter, as noted earlier, gives an honest and thoughtful account of JUPITER. FM Lord Bramall Papers, University of Buckingham.

¹¹ Jonathan Fennell, Combat and Morale in the North African Campaign (Cambridge: CUP, 2011).

¹² War Diary of 8 Corps Medical Services, WO177/343 (TNA).

¹³ 'Report of the Corps Psychiatrist' dated 17/07/1944 in War Diary of 8 Corps Medical Services WO 177/343, TNA, Kew.

quickly, a reminder that it is a constantly shifting factor.¹⁴ Throughout the Normandy fighting, 4th Armoured Brigade's incidence of battle exhaustion remained relatively low in comparison to most of the other infantry and armoured divisions, and their component brigades within 21st Army Group. During the period around operations EPSOM and JUPITER, the brigade had a total of 21 cases of battle exhaustion.¹⁵ By contrast, 43rd Infantry Division had 386 in the same timeframe.

The brigade was more frequently involved in operations that were assessed by higher commanders and the men themselves as successful in the 1943-45 period. Whilst this would be generally true for most British formations in the Mediterranean and Europe at this time, reflecting the changing fortunes of the Allied and Axis powers, 4th Armoured Brigade's role and specific deployments reinforced this. The period was not without significant defeats for the British or operations that were widely classified as ineffective or resulting in stalemate. The example of Operation PERCH (June 7th–14th 1944), particularly the parts involving 7th Armoured Division, a formation with strong links to 4th Armoured, whose reputation and morale took a substantial blow as a result, is a good illustration. A similar example can be found in the difficulties and ultimate failure of the leading formations of Operation GARDEN during September 1944. By a combination of luck and its specific roles and tasking, the brigade avoided significant commitment to most of these whilst playing a notable role in some of the biggest successes such as the closing of the Falaise Gap in August 1944. Here, the brigade performed in an effective and innovative way, taking large numbers of prisoners and destroying several German units that attempted to hold up the advance. 16 Likewise, in the operations to secure the west bank of the Rhine (February 1945), the brigade was again notable for the speed and confidence it showed in the offensive. 17

¹⁴ Certainly, levels of desertion/absence are no higher than average in the autumn of 1944, WO 213/58 and 213/60.

¹⁵ WO177/343.

¹⁶ Charles Forrester, 'Montgomery and his Legions', pp. 115-16.

¹⁷ See the letter from Maj. Gen. Sir Neil Ritchie (12 Corps) to 4th Armoured Brigade HQ following the Rhine crossing, 4th Armoured Brigade Papers, Tank Museum, Bovington.

The effect on fighting performance of long-term exposure to combat operations is a controversial area on which a great deal has been written but with no consensus emerging. ¹⁸ The opinion of a number of critical senior British officers during and after the war (repeated by some later historians) ¹⁹ was that units exposed for too long became 'sticky' or 'canny'. ²⁰ These euphemistic terms were widely used to describe troops who lacked confidence or aggression, were overly cautious or would only go forward in a slow-paced and deliberate way. ²¹ This assertion has, as already noted, been challenged significantly since about 2000, but it is certainly true that there were some issues in both 7th Armoured Division and 51st (Highland) Infantry Division during the summer and autumn of 1944 and, later, with 50th Infantry Division. Whilst it has been convincingly demonstrated these were not as severe as was once argued, they were not insignificant either. ²² Nonetheless, in the case of 4th Armoured Brigade, it appears that no 'canniness' or 'stickiness' was recorded by any of the four corps or ten divisional commanders to whom the brigade was temporarily assigned during 1944 and 1945.

It should, however, be mentioned that in several post-war interviews, Lord Bramall expressed the opinion that on joining 2 KRRC in the spring of 1944 he found the men somewhat tired and overcautious and with a feeling that they had 'done their bit'. ²³ Indeed, Fred Cooper, a sergeant in 2 KRRC, recalled widespread disquiet when the battalion was told, whilst in Italy, that it would be sent

¹⁸ There is a vast literature, but see, for example, Charles Moran, *The Anatomy of Courage*, (London: Constable, 2007), first published 1945, a dated but still influential work; Simon Wesseley, 'Twentieth-Century Theories on Combat Motivation and Breakdown' and Ben Shephard, *A War of Nerves, Soldiers and Psychiatrists* 1914–1994 (London: Pimlico, 2000).

¹⁹ This is notable in Hastings, *Overlord*, see pp. 41-42, 185, 343, 383 and indeed in a more nuanced form in Hart, *Colossal Cracks* pp. 31-33.

²⁰ Ethan Williams, '50 Div in Normandy' (unpublished MA Dissertation, US Army Command and General Staff College, 2007) pp. 85-86 and Brian Horrocks, *Corps Commander*, p.29.

²¹ See Fennell, *People's War* pp. 526-28, Buckley, *British Armour* pp. 203-5 and D'Este pp. 271-77.

²² See Anthony King 'Why did 51st Highland Division Fail? A case-study in command and combat effectiveness' in *British Journal for Military History*, Volume 4, Issue 1, November 2017.

²³ See, for instance, Andrew Williams, *D-Day to Berlin* (London: Hodder and Staughton, 2004) pp. 109-10. Also, Hastings, *Overlord*, p. 41.

back to the UK for use on 'the Second Front'.²⁴ He stated that several men openly voiced a sense of grievance about this in the presence of the CO. The general complaint was that it was not fair. He added that the men were not "truculent" and that the complaints were voiced calmly and within the context of the relevant military formalities. He recalled that Lt. Col. Heathcoat—Amory conceded it was unfair but that in times of war unfairness was inevitable and had to be accepted. Whilst not strongly present in the courts martial records, there is also considerable anecdotal evidence²⁵ that there was a surge in absences and desertion when the brigade was in the UK between Italy and D-Day, a period of almost five months. This was a difficult time for several veteran formations.²⁶ It appears that much of this was accepted as inevitable after long periods abroad and was dealt with within units and largely informally.²⁷ The phenomenon is entirely unmentioned in the brigade's official records, although 4 RHA, which would join the brigade in Normandy, recorded the suicide of a gunner early in June.²⁸ Interestingly, 4 CLY (7th Armoured Division) did cover the issue in its war diary and took formal action against a number of absentees.²⁹ The problem was clearly significant but seems to have been relatively short-lived.

It remains important to ask whether the brigade's extensive combat experience was, if not a significant negative influence on morale and motivation, perhaps, in some ways, a positive influence? It is difficult to establish such a proposition, yet it must surely, at least to a degree, underpin Montgomery's logic in constantly reusing the formation and the men's own sense that they were chosen for the 'knottier problems'.³⁰ 'Experienced' is a term often used when describing military units and it would normally have positive connotations, implying knowledge, skill and a more robust outlook. However, an influential US study published just after the Second World War

²⁴ Fred Cooper, interview, 21118, IWM Sound Archive.

²⁵ Mentioned in several of the interviews used for this study; see also Delaforce, *Marauders*, p. 73.

²⁶ Fennel, *People's War* pp. 483-85.

²⁷ See Allport, p.181, Delaforce p. 73 and IWM interview with Fred Cooper.

²⁸ WO 171/1010, TNA, Kew.

²⁹ WO 171/856, TNA, Kew. 4 cases in February and at least one in every other month.

³⁰ As quoted before, a phrase used by Anthony Bashford of 44 RTR in his interview, 12907, IWM Sound archive.

demonstrated that troops went through a bell curve of military performance over several weeks of combat;31 they were far more likely to become a physical or psychiatric casualty in the first few days but this would drop off steeply thereafter. However, it then climbed sharply again as they passed the twenty-day point. This has similarities to arguments raised by Lieutenant-General Sir Brian Horrocks immediately after the war; he stated that 'after a longish period of fighting, the soldiers, though capable of looking after themselves, begin to see all the difficulties and lack the élan of fresh troops'.³² However, Bruce Newsome has argued that some units or formations appear able to surmount this, suggesting that '[t]ruly enduring combat motivations seem to rely on group phenomena, partly described by primary group theory'. 33 Alan Allport has expressed a similar position specifically relating to the British Army of the Second World War. He cites 'fidelity to mates' and the imitative nature of courage, concluding that 'what counted was the example being set by those around you'34 and observing that an important factor in this was leadership. Patrick Victory (5 RHA) felt that the soldiers of 7th Armoured Division were "very canny" but makes an interesting point about this, saying that "green" formations were enthusiastic but suffered a lot of casualties and that their behaviour soon changed; he defined 'canniness' as a realistic understanding of risk and saw it as a positive attribute.³⁵ This is closer to Stuart Mitchell's idea of battle wisdom mentioned earlier.³⁶ Whilst not all of the elements of battle wisdom were positive for the greater organisation's (the army and government) goals, most were. Increased tactical awareness, craft skills and cognitive and physical resilience were all elements of battle wisdom which raised levels of fighting effectiveness. On what might be termed the negative side, battle wisdom also decreased risk appetite and made troops more prone to disobeying or avoiding orders they found problematic.

³¹ R. Swank and W. Marchand, 'Combat Neuroses: Development of Combat Exhaustion' in *Archives of Neurology and Psychology*, 55 (1946).

³² Quoted in D'Este p. 277.

³³ Newsome, p.133.

³⁴ Allport, p. 237.

³⁵ Patrick Victory, Reel 3, 10896, IWM Sound Archive.

³⁶ Stuart Mitchell, 'An Inter-Disciplinary Study of Learning in the 32nd Division on the Western Front, 1916-1918'.

What the brigade clearly did have by the time it landed in Italy, and more so by the time it landed in France, was an accumulation of relevant experience amongst its soldiers, manifesting in confident leaders with sound tactical thinking and troops skilled in using their weapons and vehicles. Many men understood the grotesque realities of combat and the risks it entailed but they had also acquired skills that could help to mitigate these; those not mentally or physically broken by protracted periods of active service became highly resilient, benefitting from a confidence forged by numerous successful operations. The effect of this on the group's overall outlook and behaviour dovetails neatly with the next factor, the concept of group cohesion.

Group cohesion

Cohesion is both a social and an organisational factor. Some of the literature makes a clear distinction between 'social' and 'task' cohesion.³⁷ In these accounts, social cohesion is about group bonds of closeness and friendship whilst task cohesion concerns shared goals and methods for achieving them. This study takes the position that this distinction is essentially artificial although it does reflect issues that require consideration. Proponents of this position overstate the social aspects of social cohesion whilst divorcing the task-orientated factors such as shared norms, common approaches and common goals from the social realm.³⁸ Both seem unrealistic and especially so in the context of the 'citizen armies' of the early twentieth century, as both Anthony King³⁹ and Jonathan Fennell have noted.⁴⁰ Cohesion is not about whether people in a group are friendly *per se*; in fact, this is largely irrelevant, but cohesion around tasks is unquestionably aided by shared values and norms and trust between both individuals and sub-groups.⁴¹ This grows out

³⁷ For example, MacCoun, Keir and Belkin, 'Does Social Cohesion Determine Motivation in Combat?' In *Armed Forces and Society*, Volume 32, (2005) No.1 and Garth Pratten, *New Model Diggers* in *Frontline* ed. Anthony King, (Oxford: OUP, 2015).

³⁸ See MacCoun and others, 'Does Social Cohesion Determine Motivation in Combat?', which seems to demonstrate this whilst criticising another study along the same lines.

³⁹ Anthony King, *Discipline and Punish* in *Frontline* ed. Anthony King, pp. 94-100.

⁴⁰ Jonathan Fennell, *People's War* pp. 227-34.

⁴¹ A point made in many studies; refer to Knut Pipping, *Infantry Company as Society* and Simon Wesseley, 'Twentieth-Century Theories on Combat Motivation and Breakdown'.

of, and is reinforced by, continuity of both personnel and organisational structure. 4th Armoured Brigade had both of these in the studied period. Continuity is not the only factor but it is a significant one, although it must be the 'right' kind. It is reliant on trust and confidence engendered by familiarity; continuity where there are individuals who are not trusted of course has a negative impact on cohesion. Therefore, shared norms and values are highly important, as is a sense of group identification which grows from these and from shared experiences. Again, as with leadership, Kirke's concept of the loyalty/identity structure is a valid model for understanding individuals' investment in a unit or formation. ⁴² Cohesion reduces friction between both individuals and sub-groups within larger groups, enabling more effective co-operation around tasks. ⁴³ Clearly, unlike some of the other six morale factors considered here, cohesion can be seen as both an 'input' and an 'output' in the basic morale model. Cohesion fortifies morale through its effects as an output as well as being an organisational factor which reflects the resilience of the group. The effects of cohesion are complex and can in fact be framed in a less positive light in some contexts. An example from 4th Armoured Brigade can be used to illustrate this.

As the leadership chapter has already shown, when Michael Carver took command of 4th Armoured Brigade on the 27th of June 1944, he became the youngest brigadier in the British Army. Bill Heathcoat-Amory, the CO of 2 KRRC, was fourteen years older than Carver, had been in the army for more than a decade longer and had an excellent reputation as a battalion commander,⁴⁴ a role he'd held for nearly two years, all of which had been on active service. Carver was a highly motivated and extremely capable young officer and also one intensely schooled in Montgomery's methods and values. As already discussed, within a few days of taking command, Carver had

⁴² Kirke, pp. 32, 96-97.

⁴³ See, for instance, Peter Wood, 'A Battle to Win' and Ayal Ben-Ari, *From a Sociology of Units to a Sociology of Combat Formations* in *Frontline*.

⁴⁴ William Heathcoat-Amory biography retrieved from <www.thepeerage.com> person page 4602 [08/12/2012] and Wake and Deedes, *Swift and Bold*.

sacked Heathcoat-Amory due to what he later described as the 'air of slackness' he found on visiting 2 KRRC. This incident and the period around it can illustrate some telling points about cohesion. Cohesion can clearly include elements of established practices and the informal culture of an organisation. These can sometimes have effects that are not positive in relation to the goals of the larger organisation in terms of what Charles Moskos defined as 'deviant cohesion' wherein group loyalty trumped loyalty to the army or the nation. The idea has further been explored as an enabler of war crimes and poor performance in two recent studies. The Salerno Mutiny contained strong elements of 'deviant cohesion', and whilst the army of the time would not have labelled it as such, it was a recognised phenomenon.

One could speculate whether Carver's sacking of Lt. Col. Bill Heathcoat-Amory was an attempt to head off what the newly arrived brigadier saw as a form of deviant cohesion within 2 KRRC. The previously mentioned comments by Edwin Bramall should also be borne in mind. The battalion had an established reputation for fighting effectiveness but was also noted for its, at times, cavalier approach to both uniforms and saluting. ⁴⁹ The linkage of these to discipline was well recognised and, as the chapter will show shortly, discipline was enmeshed with morale in contemporary models. ⁵⁰ All of the brigade's units had been in North Africa, and the influence of this on attitudes to uniform has been extensively remarked upon. This was satirised (at its extreme) in the famous cartoons of 'Jon' featuring 'The Two Types', ⁵¹ and photos from the period often show all ranks, but

⁴⁵ Michael Carver, *Out of Step* p.192.

⁴⁶ Charles Moskos, *The American Enlisted Man* (New York: Russel Sage Foundation, 1970).

⁴⁷ See Pascal Vennesson, *Cohesion and Misconduct: The French Army and the Mahé Affair* and Chiara Ruffa, *Cohesion, Political Motivation and Military Performance in the Italian Alpini*, both in *Frontline* ed. Anthony King.

⁴⁸ For a detailed account of events and motivations, refer to Saul David, *Mutiny at Salerno*.

⁴⁹ A legacy of North Africa. See 'Battalion Field Standing Orders' (dated 27/07/1944) in WO 171/1327 (TNA), a clear statement that standards must be raised around these issues.

⁵⁰ Brigadier A. B. McPherson, *Discipline* (1950) War Office, London, (WO 277/7 TNA), which gives the army's official report on the area for the Second World War: 'In the inculcation of "morale", discipline is an indispensable factor'. p. 2.

⁵¹ Jon, *The Two Types* (Naples: British Army Newspaper Unit, CMF, 1944), a compilation of the cartoons printed in Italy. Researcher's collection.

particularly officers, in a mixture of temperate and desert uniform, often with added civilian items.⁵² Stuart Irwin, an NCO in 1 RB (another veteran unit), stated that in the field, 'we wore more or less what we liked'.⁵³ Even so, one should note that Carver was careful not to disrupt the cohesion of 2 KRRC too much and kept an established officer of the battalion (Ronnie Littledale) as the new CO.

Elsewhere in the brigade, but in a similar vein, when Robin Dunn arrived as a new officer in 4th
Regiment Royal Horse Artillery (4 RHA) early in 1945, he noted the strong unit culture that existed:

They had adopted the desert approach to informality of dress and showed a bored disregard of military discipline and administration ... but they were superb in battle ... they were contemptuous of anyone ... who had not shared their experiences.⁵⁴

Dunn was able to integrate rapidly because he was also a veteran of Eighth Army in North Africa, albeit not the RHA, and thus understood the slang, had credibility in the soldiers' eyes and knew the right way to lead in that cultural environment. Another less experienced officer might not have fared as well. Again, one can see the means by which forms of deviant cohesion, or indeed in some ways battle wisdom, could be profoundly problematic even when units remained broadly effective in combat. Although this area is often avoided in interviews, at least one veteran⁵⁵ clearly describes a unit (within 53rd Infantry Division) where, whilst there was pride in their fighting effectiveness, what Kirke describes as illegitimate secondary adjustments⁵⁶ were alleged to be commonplace. In addition, the unit was notably poorly turned out; allegedly it was described by General Horrocks as "a scruffy shambles".⁵⁷ Nevertheless, with 4 RHA, Dunn is clear that the gunners were not only

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⁵² From Jimmy Sale's photos; see, for instance, those of 3 CLY, NAM 1975-03-63-14-213 (Italy) and 1975-03-63-5-67 (Libya), National Army Museum. Other than berets, it is very hard to find two individuals dressed similarly, let alone identically.

⁵³ Stewart Irwin, Reel 3, 18210, IWM Sound Archive.

⁵⁴ Dunn, Sword and Wig, p.80.

⁵⁵ Roy Hubbard (1st Battalion, Manchester Regiment), Reels 5 and 8, 21104, IWM Sound Archive.

⁵⁶ Kirke, pp. 74-76. Secondary adjustments are informal 'rule-bending' carried out locally to problem solve or make life easier; legitimate ones are those that would be widely accepted; illegitimate ones are clear breaches of military law and are far less widely accepted.

⁵⁷ Hubbard, ibid.

highly effective in battle, noting the speed and accuracy of their fire, but that in most respects, discipline was not, on the whole, poor. The value added by cohesion was understood even if, at the time, it was discussed in rather abstract and ill-defined terms; but what are the specific impacts of cohesion? How does it enhance fighting effectiveness and can this be demonstrated?

In recent years, two major pieces of research conducted by British academics following the prolonged UK deployments in Iraq and Afghanistan have produced some valuable results. ⁵⁸ They found that 'unit cohesion was associated with lower levels of probable PTSD and common mental disorder in UK troops who were deployed ... Associations between the individual unit cohesion items and PTSD and common mental disorder were similar between regular and reserve personnel. ⁵⁹ The use of both regular and volunteer reserve troops is also interesting in the current context as it reflects a broader group than just 'professionals' and thus has some, albeit limited, similarity with the 1939–45 demographic. Sparrow's monograph draws distinctions between the morale of regular soldiers and wartime conscripts, ⁶⁰ showing that differences in attitudes and motivation were well understood. The impact of mental breakdown amongst troops during or following combat is thoroughly established and was, as already discussed, considered a significant indicator of morale by the British Army during the Second World War. ⁶¹

The markers chosen for these studies to indicate cohesion are interesting and offer some constructive ideas about factors that can indicate or cause strong or weak unit cohesion. The two studies use similar questions to try and test levels of cohesion. Both used statements similar to the following ones: 'I feel a sense of comradeship (or closeness) between myself and other people in

⁵⁸ Du Preez and others, 'Unit cohesion and mental health in the UK armed forces' in *Occupational Medicine* 2012; 62 and Norman Jones and others, 'Leadership, Cohesion, Morale, and the Mental Health of UK Armed Forces in Afghanistan' in *Psychiatry* 75(1) Spring (2012).

⁵⁹ Du Preez p. 50.

⁶⁰ WO/277/16, TNA, Kew.

⁶¹ Jonathan Fennell, *Re-evaluating Combat Cohesion* in *Frontline* ed. Anthony King.

my unit', 'I am able to go to most people in my unit when I have a personal problem' and 'I feel well informed about what is going on in my unit' and asked participants to strongly agree, agree, disagree or strongly disagree.⁶² The responses to these statements certainly give an indication of a sense of belonging and group identity in the positive responses and one of fragmentation and poor inter-personal relations in the negative ones. These may not give a complete assessment of cohesion but they are certainly part of that picture. More importantly, in the current context they are markers that could comfortably be transferred to the 1940s.

As already noted, it is always wise to approach with caution the use of modern studies as tools to examine historical situations. Compare this with Fred Cooper (a sergeant in 2 KRRC) reflecting on this in his IWM interview, describing his feelings when he was wounded early in the Normandy fighting: "the lads that I'd been with in the desert, in Italy and in Normandy; you feel part of a family, and if you wasn't with 'em ... you feel like a coward". 63 Cooper had the opportunity to take a training post following a spell in hospital; he rejected this to return to C Company in Normandy. This absolutely sounds like the kind of cohesion explored in the Iraq and Afghanistan studies. It is also notable that a significant number of soldiers from the brigade chose to take Leave in Lieu of Python (LILOP) rather than Python 64 when this began to become available in late 1944, indicating a desire to remain with their units even when potentially safer jobs were available. 65 The introduction of Python was problematic across 21st Army Group but particularly in those formations that had fought in North Africa and Italy. 4th Armoured Brigade was of course part of this group, and it is notable that

⁶² See Jones and others, p.51 and Du Preez and others, pp. 2-3.

⁶³ Fred Cooper, interview, 21118, IWM Sound Archive.

⁶⁴ Regarding Python, see 4th Armoured Brigade HQ, January 1945 for officers taking leave; for issues more generally, CAB 80/95/26, TNA, Kew, and the debate on June 8th, 1945, at www.Hansard.Parliament.UK. PYTHON was leave given to soldiers who'd been overseas for more than four years initially, although the qualifying period was subsequently reduced.

⁶⁵ Interestingly, the great majority of officers within the 'teeth' units of the brigade appear to have chosen LILOP over PYTHON.

officers from the regimental and brigade HQs attended numerous meetings in the period October to December 1944 regarding Python.⁶⁶ Michael Carver later recalled:

[Python] would have played havoc with ... units which had ... served in the Middle East ... fortunately, most took the leave instead of the posting.⁶⁷

Soldiers taking LILOP in preference to PYTHON was not an unusual choice but it was not as common in many other formations.

This section also needs to consider another 'output' linked to poor morale and specifically cohesion. This barometer of poor morale was used at the time and does not seem to be an unreasonable measure. It is cases of suspected self-inflicted wounds. This act was one of violent, though essentially rational, despair, as Mark Humphries argues, citing links to isolation, exhaustion and a passive anxiousness developed in periods of tense inactivity. Men who were desperate to escape combat were understood to be capable of seriously injuring themselves in order to do so; there were numerous well-documented cases of this during the First World War. Figures for self-inflicted wounds (SIW) were also recorded during the Second World War and relevant figures are contained in the 8 Corps Medical Services War Diary. These note that from June 16th to August 15th the corps had 34 cases of suspected self-inflicted wounds. These were concentrated exclusively in the 'teeth' formations, one of which had 16 cases alone (Guards Armoured Division); several more have 3 or 4 each. 4th Armoured Brigade, in common with four other formations, has none at all. The war diaries of 14 LFA also contain information for the last quarter of 1944. The unit records treating one

⁶⁶ For example, GREYS war diary 1944, WO 171/842, TNA, Kew. GREYS were particularly hard hit, with 182 ORs and 10 officers eligible from a total strength of 553 (all ranks) in late September. ⁶⁷ Carver, p. 207.

⁶⁸ Mark Humphries, 'Wilfully and With Intent: Self-Inflicted Wounds and the Negotiation of Power in the Trenches' in *Social History*, vol. XLVII, no. 94 (June 2014).

⁶⁹ For an excellent overview of the phenomenon, see Mark Humphries, 'Wilfully and With Intent'. Humphries demonstrates that SIW have been little studied; his figures also show whilst uncommon, SIW seem to have been more common in the British and Canadian armies of the First World War than in their 1939–45 equivalents.

⁷⁰ WO177/343, TNA, Kew.

case of SIW from the brigade during the period October to December.71 Unfortunately, there are no specific figures for the brigade in 1945, and 14 LFA was treating casualties from a number of formations.⁷² Certainly, SIW were not always detected as being such; in an environment where injuries were commonplace this was understandable. In addition, there is some anecdotal evidence that a blind eye was occasionally turned to certain cases. 73 Many SIW were thus probably counted as cases of accidental injury; however, as already discussed, these were also very low within 4th Armoured Brigade. The low incidence once again indicates the relatively robust morale and cohesion of the brigade. A sense of belonging and mutual dependency was important.

4th Regiment Royal Horse Artillery, the brigade's artillery, provides another revealing example at a higher level. Whilst the regiment had worked with the brigade from time to time on an ad hoc basis since 1942, 4 RHA was only attached to 4th Armoured Brigade full-time from the start of the Normandy campaign. It was never formally a permanent fixture (staying part of 5th AGRA) despite remaining a part of the brigade until the end of the war. However, within a few months, there is good anecdotal and photographic evidence that gunners of 4 RHA began to see themselves as Black Rats. Quite quickly, Jerboa sleeve flashes and 4th Armoured vehicle markings began to appear, and it seems that initially this occurred informally and spontaneously, beginning in the late summer. Formal instruction regarding these was only given in October 1944. 4 RHA's war diary for June 31st, 1944, contains a revealing entry which it is worth quoting in full:

> Since landing in France, the regiment has now been under command of 2 Armies, 4 Corps, 6 Divisions, 1 AGRA and 1 Armoured Brigade. Continuity for replacement of casualties and equipment is thus extremely difficult. The only continuity we have been able to maintain has been through the goodwill of 4th Armoured Brigade who

⁷¹ WO 222/959, October-December 1944, Appendix B. TNA, Kew.

⁷² WO 222/959, January-March 1945; 3 cases of SIW were treated but casualties were from across both 8 and 30 Corps.

⁷³ Bielecki, pp. 126-27.

look after us as one of their own units. Without their help we would be in a very bad position.⁷⁴

These incidents indicate a number of interesting factors around loyalty/identity. The strength of identity within 4th Armoured Brigade, the desirability of this identity when viewed by 'outsiders' and the ability to co-opt others into it. Not all formations were able to generate this degree of identification and to integrate 'newcomers' in the same way.⁷⁵ As the chapter examining leadership showed, 4th Armoured Brigade's lack of a regional or home nation identity may well have assisted with this. In addition, 4 RHA's status as veterans of North Africa and Italy would certainly have improved their prestige and perceived reliability in the eyes of the Black Rat veterans and provided a common experience base and indeed language (the importance of 'desert' slang again)⁷⁶ to help integration.

The power of the identity forged in North Africa and then reinforced in Italy was unquestionable. One small example gives an interesting illustration of its lasting impact. David Weir worked on the railways in Yorkshire in the 1950s; he stated that his station was dominated by a tightknit clique of Eighth Army veterans and the slang of that army peppered everyone's speech, including his after a few weeks.⁷⁷ It is also notable that the Eight Army Veterans Association was one of the larger and more active post-war veteran groups.⁷⁸

On landing in Italy in September 1943, 4th Armoured Brigade, although only recently reorganised, entirely comprised units that had been in North Africa for at least 18 months beforehand. It

⁷⁶ For example, see Dunn, Sword and Wig, p. 80 and Tony Rampling (44 RTR) interview (researcher).

⁷⁴ War Diary of 4 RHA (1944) WO 171/1010 TNA, Kew.

⁷⁵ See French p.143.

⁷⁷ David Weir, 'Language and liminality in railway work in the 1950s from the perspective of a half-stranger', Paper at 15th International Ethnography Symposium, August 2022.

⁷⁸ See https://reuters.screenocean.com/record/731684> [retrieved 11/10/2022] for a Gaumont Newsreel about the 1951 reunion; also, *Birmingham Evening Mail*, October 17th, 1986, p. 45, for a story about the anniversary of El Alamein stating that 3,000 veterans would attend an event.

contained a mix of regular and Territorial units, both of which had received significant reinforcement from wartime conscripts. Barring a few brief periods of intense operations (the Alamein battles, the breakthrough on the Mareth Line) these units had not taken heavy casualties. The oft-cited argument that primary groups would always be undermined by significant casualties⁷⁹ seems not to hold here. Casualties were never experienced at the levels found in the Wehrmacht or Red Army, and where they were occasionally closer to those, it was only for short periods. The practice of having some personnel LOB (Left Out of Battle) used by most British units certainly assisted with this, helping to preserve a core group of experienced men.⁸⁰ Anecdotally, friendship and association groups appear to have been well established.81 14 LFA recorded that on the eve of landing in Normandy, only four of its 158 RAMC ORs did not have 'previous battle experience'.82 In addition, many pre-war officers and senior NCOs remained in the same often influential positions throughout this period. For instance, 2 KRRC had the same CO from August 1942 through to June 1944 and the battalion's C Company had the same OC from January 1943 through to the end of the war.83 44 RTR also had the same CO throughout the period covered, Lt. Col. Hopkinson, as did 4 RHA, despite Carver's efforts to sack Lt. Col. Livingstone-Learmouth. Continuity, as seen here, helped build up trust and confidence in the capabilities of peers and leaders, and this reinforced cohesion across the brigade. The result of this was seen in heightened levels of teamwork and group resilience. However, soldiers needed more than willpower and team spirit to remain in the field, and the provision of physical necessities was vital.

⁷⁹ Although advanced by many, refer principally to Omer Bartov, *The Eastern Front, 1941-45: German Troops and the Barbarisation of Warfare.* It is discussed throughout.

⁸⁰ This practice appears to have emerged during the First World War and resumed in the Second; specific references to it in the 1939–45 war diaries are sparse, though many veterans mention it. There is a tacit admission of the need to do something similar in *ATM No. 32* (May 1940). The DTI questionnaires issued to officers within WO 232/7 (1943) ask about the practice, so it was obviously established. Roy Griffis is clear about it happening in the GREYS, 23192, IWM Sound Archive.

⁸¹ As testified by all of the veterans interviewed for this work who had served in North Africa and Italy. All speak of particular 'mates' they bonded with in this period and the influence of particular informal groups within their sub-units.

⁸² Quote in WO 222/959, Sheet 3, figures from WO 177/854 (June 1944), both TNA, Kew.

⁸³ Major Roland Gibbs, barring a period of several weeks after he was injured during JUPITER.

Supplies

The importance of logistics in war is of course well understood and has been acknowledged since at least Classical Antiquity.84 Twentieth-century armies were enormously greedy organisations requiring vast quantities of food, fuel and ammunition on a daily basis. Not only did this logistical chain support the operations of troops, it also eased their difficult conditions and supported morale. This happened through the provision of more food than that which was merely necessary to live on, post from home and of course through access to medical care. This was an area where the British excelled.85 Shortages of any materials are barely mentioned in the war diaries or the veteran accounts.86 Whilst the British Army worked hard to ensure this from 1942 onwards and was generally highly effective, some parts of it were more efficient at doing this than others. As an independent armoured brigade, 4th Armoured was configured to be semi-autonomous, and North African experiences had reinforced this in practice. 5 Company RASC was the part of the brigade chiefly responsible for this. The RASC companies assigned to independent armoured brigades were slightly larger than all other brigade-level RASC units. This gave additional resilience and flexibility to local logistical arrangements. Small things such as hot meals, soap and cigarettes could make a significant impact in the isolated, restricted and arduous world inhabited by the fighting men. As many sources have noted, food supplies were particularly important.⁸⁷ David French has written that this was 'not merely because they provided physical sustenance but because their preparation and consumption bonded men together'.88Small increases in ration scales or improvements in their quality were generally positive in terms of their effect.⁸⁹ The introduction of 'compo rations' in 1942 was widely assessed as having a beneficial effect.90

⁸⁴ See, for instance, Julius Caesar describing supply difficulties and solutions in *The Gallic Wars* (Oxford: OUP, 2008).

⁸⁵ French, Churchill's Army p. 278 and Buckley, Monty's Men pp. 299-300.

⁸⁶ A shortage of cigarettes in Italy is mentioned in Sidney England (3 CLY) Reel 3, 17268, IWM Sound Archive.

⁸⁷ See, for instance, James Goulty, *The Second World War through Soldiers Eyes* (Barnsley: Pen & Sword, 2016) pp. 94-100, Allport pp. 111, 144 and 183-84 and French, *Churchill's Army* pp. 131, 143.
88 French, *Churchill's Army* p. 143.

⁸⁹ See Goulty, The Second World War through Soldiers Eyes pp. 94-100.

⁹⁰ Gavin Brown "Dig for Bloody Victory": the British Soldier's Experience of Trench Warfare, 1939-45' (unpublished PhD thesis, Oxford University, 2012).

For the Germans, the supply chain was far more tenuous; ammunition, food and medical supplies were all periodically in short supply, 91 but the shortage of any of these is not noted in documents seen for this study concerning 4th Armoured Brigade between 1943 and 1945. A few accounts from the brigade mention a shortage of cigarettes whilst in Italy. 92 More significantly, the REME unit notes occasional shortages of vehicle spare parts and replacement engines in the autumn of 1944 but these never reached critical levels. 93 The overall weakness of German logistics was a product partly of enemy action but also deeply rooted in Germany's military planning and organisation.94 This had a powerful effect on operational effectiveness because, as Jürgen Förster has argued, 'contrary to doctrine, operational successes could not be fully exploited'.95 British soldiers became aware of the Germans' weaker logistics as the war progressed, with many veteran accounts mentioning in particular the Wehrmacht's reliance on horses but also the importance of bicycles and commandeered civilian transport⁹⁶ and their frequent shortages of medical supplies.⁹⁷ The impact of these elements on British troops witnessing them has had little attention in the literature, and it is probably a subject worthy of further study. It appears to have undermined the narrative of German technical superiority and military thoroughness that became well established early in the war and which will be considered in more detail shortly.

An additional advantage conferred by the British Army's robust logistical chain lay in the consistent ability to receive post from home. Connection to family and friends was generally a positive influence on morale, and many veteran accounts refer to the pleasure that letters from home

⁹¹ Wilhelm Tieke, *Firestorm* p.104 (fuel and ammunition) p.123 (artillery shells) Hastings *Overlord* p. 228 (general shortage of medical supplies), *7th Armoured Division Intelligence Summary No.8*. (food) in WO 171/439, TNA, Kew.

⁹² Sidney England (3 CLY), Reel 2, 17268 IWM Sound Archive.

⁹³ WO 171/604, TNA, Kew.

⁹⁴ French, Churchill's Army pp.120-21.

⁹⁵ Förster in *Military Effectiveness* pp. 202-3.

⁹⁶ Noted in Wake and Deedes, *Swift and Bold* p. 246. See also Allport p. 272 and Sidney England (3/4 CLY) Reel 4, 17268, IWM Sound Archive.

⁹⁷ See Harry Rawlins (12 KRRC) Film 5, Legasee.org.uk. Also, 'Enemy Personnel' (Appendix B) in War Diary of 8 Corps Medical Services 1944, WO 177/343, TNA, Kew.

brought. 98 Writing letters back in return also created a sense of normality and helped to constructively fill periods of downtime. Christine Bielecki asserted that '[l]etters reminded men what they were fighting for' but that news from home could sometimes be problematic.99 The collapse of relationships was more common when men had been overseas for protracted periods and thus had more of an impact on formations such as 4th Armoured Brigade. Problems of that kind are certainly attested; indeed, elements of Len Livingston-Learmouth's behaviour were attributed by some to the fact that 'his wife had run off with another man'. 100 Sparrow's monograph on morale discussed the impact of infidelity and relationship breakdowns at length, citing these as a cause of 'anxiety and depression'. 101 However, there were other worries about home as well. The soldiers of the brigade were, as shown earlier, overwhelmingly drawn from urban areas, with particularly strong representation from London, Bristol, Glasgow and the large cities of the English north-west. All of these places were subjected to German air raids at various points between 1940 and 1944. 102 Concerns about families could also cause great apprehension. Ted Wood (2 KRRC) recalled a man in his company being informed that his wife and child had been killed in an air raid whilst the battalion was in Libya; 'he just cried and cried' but 'there was nothing anyone could do'. 103 The availability of home leave, even for extreme compassionate cases, was very limited until well into 1944.¹⁰⁴ Of course, bad news travelled both ways. John Cloudsley-Thompson (4 CLY) recalled having to write 25 letters to the next-of-kin of those missing or killed at Villers Bocage in June 1944, a draining and difficult task for which he stated he had no training. 105 The Royal Scots Dragoon Guards Museum holds a fascinating though tragic collection of letters written by Corporal McKnight of the GREYS and his sister Daisy. 106 The letters give a good sense of how frequently some

⁹⁸ John Cloudsley-Thompson (4 CLY) said that letters from home "made me very happy", Reel 10, 31558, IWM Sound Archive.

⁹⁹ Bielecki, pp. 297-98.

¹⁰⁰ Dunn, p. 81.

¹⁰¹ Sparrow, *Morale of the Army 1939-45* p.14. WO/277/16 TNA, Kew.

Family members being killed, injured, or made homeless appears quite common amongst the formation's oral histories. For example, Fred Cooper's brother was killed in an air raid, Ted Wood's wife was injured in a V-1 attack and John Thorogood's mother was 'bombed out'.

¹⁰³ Ted Wood, interview with the researcher, 2013.

¹⁰⁴ As acknowledged by Sparrow, p.14-15. WO/277/16 TNA, Kew.

¹⁰⁵ John Cloudsley-Thompson, Reel 8, 31558, IWM Sound Archive.

¹⁰⁶ Letters from Cpl McKnight to Mrs Wright, G402, RSDG Museum, Edinburgh.

soldiers wrote letters home and were able to receive post. McKnight was able to write several letters a month throughout June and July. Sadly, he was killed on August 1st, 1944, when his Sherman was hit by a German anti-tank gun at close range. There is a letter from the regimental padre followed by one from Trooper Margetts, a friend of McKnight's, both of whom did their best to console Daisy and assure her that his death was 'instant'. Despite the tragedy that letters could convey, their effect overall was hugely positive, as McKnight's letters actually show. He was able to receive newspapers, magazines and items of clothing sent from home, all of which were, very clearly, much appreciated. As with food, cigarettes and military supplies, the overall effect of the efficient postal system was positive.

The brigade thus enjoyed a significant logistical advantage over its enemies, but in comparison with its peers the advantages were marginal with some and non-existent with others. It can be concluded, then, that whilst the logistical/supply factors were important in their effect on morale, this was the product of army-wide policies and cannot be seen as an area where individual formations were able to either fail or succeed in any significant way. However, the discussion of supplies must also include another area of logistics and welfare which was highly important: medical provision. For the purposes of this study, only arrangements at unit and formation levels will be considered. These improved significantly across the British Army in the period under consideration, a result of both technological advances and organisational developments. Montgomery took a personal interest in these improvements, writing that 'the soldiers all know that should they fall in battle they will have the best possible expectations of sound treatment and human consideration; this is a great factor in maintaining morale'. 109

¹⁰⁷ https://www.cwgc.org/find-records/find-war-dead/casualty-details/2628032/samuel-mcknight/]retrieved January 10th 2023]; also a letter from Trooper Margetts in G402, RSDG Museum, Edinburgh.

¹⁰⁸ Ben Kite, Stout Hearts, Chapter 9 and Buckley, Monty's Men pp. 258-59 and 279-80.

¹⁰⁹ Quoted in Kite, Stout Hearts p. 290.

During the period in the UK prior to the invasion, 2 KRRC's medics received new first aid kits with better field dressings and morphine now held down to platoon level. 110 The brigade also benefited from having its own attached Field Ambulance unit, 14th Light Field Ambulance, which joined the brigade at the start of the Italian campaign. Not all brigade-strength formations had their own (although the majority did), and this was undoubtedly an advantage, securing access to rapid casualty evacuation and better medical care at early opportunities. Light Field Ambulances were fully mobile, and whilst slightly smaller in personnel numbers than their infantry equivalents, they had more vehicles, including some armoured ones. The confidence in, and appreciation of, the brigade's medical services is strongly reflected in veteran accounts. Ted Wood recalled the ambulances of 14th LFA coming up to collect him and his numerous wounded comrades during JUPITER; despite the close proximity of the enemy and continued firing, an ambulance picked up "half a dozen" wounded. 111 L/Cpl Wood and one or two others had to cling to the outside of the vehicle as it headed back. When he fell off, fainting due to blood loss, the ambulance stopped and the crew somehow crammed him inside. He was convinced he would have died were it not for their actions. 112 Veteran accounts from the brigade seen for this study only have praise for medical personnel; whilst this is not unusual, criticism is not hard to find in some other interviews. Roy Hubbard (1st Bn Manchester Regiment) was dismissive of RAMC personnel, referring to them as "Rob All My Comrades". 113 Karen Horn's study of attitudes to death and injury in the North Africa campaign¹¹⁴ also contains criticism of RAMC personnel being voiced by some soldiers, particularly centred on perceived ineffectiveness and officiousness, but these remained minority views.

¹¹⁰ WO 171/1327 War Diary of 2 KRRC (1944), TNA, Kew.

¹¹¹ Ted Wood, interview with the researcher (05/05/2013). He had suffered multiple shrapnel wounds to the lower torso from German shelling.

¹¹² Wood, ibid.

¹¹³ Roy Hubbard, Reel 8, 21104, IWM Sound Archive. It is worth noting that derogatory nicknames for other units were (and remain) common and were not always a sign of genuine animus. Also attested in Richard Holmes, *Soldiers* (London: Harper Collins, 2011), Kindle edition, p. 461.

¹¹⁴ Karen Horn, "This is war, isn't it?" Fear and mortality from El Wak to El Alamein,1940–1942' in *Scientia Militaria*, South African Journal of Military Studies, Vol 48, Nr 2, (2020).

Beyond injuries in battle, it is also appropriate to consider here what are defined in the contemporary records as 'other sickness', which runs the whole gamut of minor non-combat injuries, illness, chronic conditions and indeed psychosomatic complaints. These too were linked to the provision of medical care and the conditions soldiers lived under. Jonathan Fennell believes this may in fact be the area which bears the strongest correlation with morale. This appears to be a convincing argument and one also borne out by statistics from other organisations working in HVTE/VUCA areas. However, a note of caution should be struck here regarding certain recurrent illnesses such as malaria, which continued to have an effect on formations that had served in North Africa long after they'd left that theatre.

Overall, sickness was in fact relatively high for the brigade over the period for which there are the most detailed figures, June 16th to August 15th.¹¹⁷ The figures are broken into three periods; the totals are 7, 90 and 121, but malaria relapses form by far the largest group of each total.¹¹⁸ In the period following June–August 1944, the next group of reliable figures occur for October to December. These are from 14 LFA and are in the *Medical Quarterly Reports*.¹¹⁹ The one for the last quarter of 1944 states that 'the health of the formation has been very good' and also adds that 'malaria has practically died out'.¹²⁰ 14 LFA treated a total of 276 soldiers from 4th Armoured Brigade for various illnesses during the period. Also notable are the relatively low levels of accidental injuries and the low incidence of sickness and diarrhoea bugs. Returning to 8 Corp's Medical Services war diary, accidental injuries (some of which might of course be SIW) appear to cause significant casualties in some formations: 48 in Guards Armoured Division¹²¹ over the entire period and 43 in

¹¹⁵ Fennell, *Re-evaluating Combat Cohesion*, pp.139-47.

¹¹⁶ There has been recent research on this in policing in the UK. See Nina Melunsky, 'Burnout and Social Connectedness: Predictors of PTSD and Well-Being in the Police' (unpublished PhD thesis, University of Essex, 2016). This demonstrates a correlation between illness, stress and 'poor morale'.

¹¹⁷ War Diary of 8 Corps Medical Services 1944, WO 177/343, TNA, Kew.

¹¹⁸ These were very common in units that had served in North Africa and Italy.

¹¹⁹ WO 222/959 TNA. Kew.

¹²⁰ Quarterly Report, October-December 1944, Sheet 3, within WO 222/959.

¹²¹ Divisions were of course far larger than independent armoured brigades, but the comparisons are still of use provided this difference is considered. Armoured divisions had a little under three times more total

11th Armoured Division; 4th Armoured Brigade have just two. It is noteworthy that 7th Armoured Division also had only three accidental injuries in the same period, which is even lower given their larger establishment. One possible explanation is that these more experienced formations suffered less cognitive impairment through combat-related friction and the tiredness caused by operations because they understood that this would happen and learnt both to deal with it and to mitigate it. ¹²² Stomach bugs of various types were, anecdotally (in British and German accounts) very common and caused much discomfort. ¹²³ They could be significantly controlled through good field hygiene. During this period, the brigade reports none at all; by contrast, 11th Armoured have 25 and 15th (Scottish) Infantry have 30. Few formations have less than 10 cases, and it should be borne in mind that these are just the cases who required treatment beyond that which the battalion or regimental Medical Officer could offer. Interestingly, 7th Armoured is again one of the few formations with a comparable record.

As with the accidents, it is very likely that something in their previous experience was having an impact; two factors look plausible. First, the experience of North Africa, where sickness reached appalling levels early on, taught units to be particularly thorough around field hygiene. Second, prolonged operations in the highly unhygienic conditions of the desert war ensured that those men not permanently invalided out developed particularly robust immune systems. Almost certainly, the causation lies in a combination of both of these influences. Something that these last two points illustrate very clearly is the way in which not all of these factors were generated by the actions of

personnel and infantry divisions, closer to four times more in comparison to an independent armoured brigade.

¹²² Joint Doctrine Note 3/11 *Decision Making and Problem Solving: Human and Organisational Factors* (Shrivenham: Development, Doctrine and Concepts Centre, 2011) A UK MOD publication offers some ideas around 'cognitive resilience'.

¹²³ 'Gastro-enteritis assumed...somewhat alarming proportions' Quarterly Report of DDMS, 21st Army Group p.8. WO 222/456, TNA, Kew.

¹²⁴ 14 LFA's *Quarterly Medical Reports* specifically mention that because of 'considerable active service ... [the formation] ... maintained a high level of sanitation'. Sheet 3, Quarterly Report, July-September 1944, WO 222/959. See also, Fennel p.144.

¹²⁵ Douglas Browne (44 RTR) discussed this in his interview with the researcher. He was frequently ill on arriving in North Africa in 1941 (including a spell in hospital) but stated after a year he was not ill again. However, he did catch malaria in Italy in late 1943.

commanders or indeed by the policies of the army or the War Office. This was also the case with another two unalterable background elements; terrain and the weather.

Weather and Terrain

The primacy of the situational can also be seen in the effects of climate and terrain on the morale of troops. As Neal Dando has written, 'a formal discussion by leading military historians [in 2012] noted that terrain had yet to be fully analysed as a separate topic in relation to army operations during the Second World War'. He goes on to argue that terrain 'heavily influenced planning, command decisions and tactics during the key battles'. The role of terrain and the related factor of weather in influencing morale remains even less examined, yet there is strong evidence to suggest that the effects were profound. The way in which the two factors combine is particularly important. A brief examination of some of 4th Armoured Brigade's operations during the period studied illustrates the powerful impact of the conjoined climate/weather dynamic.

In Italy, the regions that the British advanced through from the coast, Puglia and Abruzzo, were largely hilly or mountainous and were intercut by numerous rivers. It was a far more verdant country than either North Africa or Sicily. This was a relatively sparsely populated and rural region of Italy with little in the way of industry or infrastructure and consequently it had few good-quality roads. As one commentator has observed, 'In the open desert, ambush had been almost impossible ... In Italy, woodlands and hedges and hillsides offered endless opportunities for cover ... all the tactical tradecraft they had mastered in Africa had to be forgotten as they learned about confined, close country fighting.' ¹²⁸ The brigade spent winter in Italy when the weather was typically cool and wet. Morale remained resilient but veteran accounts are full of comment on how physically demanding

¹²⁶ Neal Dando, 'The impact of terrain on British operations and doctrine in North Africa 1940-1943' (unpublished PhD thesis, Portsmouth University, 2014) p.11.

¹²⁷ Dando, 'Terrain' p.11.

¹²⁸ Allport, Browned Off and Bloody Minded p. 156.

and unpleasant this period was. 129 It is notable that the conditions did have a pronounced effect on some other formations. 130 However, the period when the climate and terrain appear to have had the strongest and most directly quantifiable effect on morale was during the winter of 1944-45 in Holland. Here, during a period of near-static warfare, the brigade spent almost three months in a flat, waterlogged lowland area along the Willemsvaart canal and then the river Maas during a particularly cold winter. Veteran accounts again reflect how uncomfortable and dispiriting this time was, but now the figures for desertions, absences and minor disciplinary offences reflect that morale was less robust. Whilst there were not large numbers of casualties, they were not absent, and the sporadic and unpredictable nature of these, mostly caused by artillery or snipers, seems to have added to their impact, further affecting morale. This illustrates the way that the morale inputs can interlock and amplify each other's effects. 2 KRRC, a battalion with an apparently excellent disciplinary record¹³¹ throughout most of the studied period, recording very low levels of absence and desertion, was particularly hard hit with a burst of desertion and absenteeism. 132 As Christine Bielecki has observed, 'For most of the over-stretched infantrymen, the single most important element in degrading morale was the weather', 133 and this was probably particularly true in the wet and bitterly cold winter of 1944. In addition, as David French observed, the discomfort generated by climate coincided with another factor that degraded morale; across the army 'the number of deserters tended to rise sharply during periods of positional warfare'. 134 Indeed, Harold Butterworth, the deputy CRASC of 50th infantry Division, stated in a post-war interview that he felt that this period of static warfare in cold and wet conditions in late 1944 was 'the final straw' for the division. 135 50th Division was withdrawn from the line and downgraded to a reserve and training formation shortly afterwards, with its newer soldiers being redeployed to other formations.

¹²⁹ In interviews with Fred Cooper (IWM) Ted Wood (researcher) and the papers of A.E. Bromley, 7810, IWM. See also Wake and Deedes, pp.180-82.

¹³⁰ See Richard Doherty, Eighth Army in Italy pp. 57-59 and Bielecki pp. 77-79.

¹³¹ This does require some qualification. As already seen, the battalion did have some issues around dress. It is also the unit within the brigade with the poorest discipline record overall, but compared to many units outside of the brigade it had an excellent record.

¹³² WO/171/190 TNA, Kew.

¹³³ Bielecki p.181.

¹³⁴ French, Churchill's Army p.142.

¹³⁵ Harold Butterworth, Reel 10, 17341, IWM Sound Archive.

The composition of the brigade gave some mitigation of the effects of the weather and even, to a lesser degree, the terrain. Armoured units had their tanks and motor battalions had far more vehicles than conventional infantry battalions. The consequence of this was the ability to keep some 'home comforts' much closer to the front and to have a relatively waterproof place to retire to when there were no buildings available. This undoubtedly had an effect, insulating, in some cases quite literally, the brigade's soldiers from the worst that climate and terrain could throw at them, certainly in comparison to the infantry and some in the artillery. This would have produced a small but not negligible reduction in the adverse impact of the weather. It is important that during the winter in Holland, the armoured regiments frequently had to deploy detachments to act as infantry, This and 2 KRRC were often deployed in positions dug by other infantry units and were without their carriers and half-tracks. The lack of the support they were accustomed to combined with the miserable conditions had an unambiguous impact, as already discussed. Yet, whilst the weather could 'grind down' soldiers, enemy action could have far more powerful effects.

Actual and perceived enemy capabilities

The role of enemy forces in shaping the morale of their opponents is fundamental. This is complex as it operates in different ways and at different levels. The key here is that perceptions are almost as important as deeds. Throughout the period of this study, 4th Armoured Brigade's main opponents were the forces of the German Wehrmacht comprising the German Army, the ground troops of the Luftwaffe and Kriegsmarine, and the separate armed force of the Waffen-SS, the latter also contained significant numbers of pro-Nazi volunteers from occupied and neutral countries. 4th Armoured Brigade encountered every one of these elements during the period. This large and

¹³⁶ A point made by a veteran of 1 RB, another motor battalion, Stewart Irwin, 18210, IWM Sound Archive. ¹³⁷ See, for instance, WO 171/4697 War Diary of 3/4 CLY (1945). There are numerous entries in January relating to static positions and patrolling, all dismounted. Also Anthony Bashford, Reel 4, 12907, IWM Sound Archive.

varied force contained a very wide range of units and formations, trained and equipped to different levels, and as already seen, showing great variance in fighting effectiveness. However, a number of crucial points existed in the general British perception of German capabilities, and these should be explored. There was a widely felt sense that the Germans had better equipment in terms of weapons and AFVs. The superiority of German infantry light support weapons (principally light and medium machine guns and mortars) both in quantity and quality as against British equivalents was widely remarked upon at the time and continues to be so even now. 138 German *Nebelwerfer* 139 loom particularly large in many veteran accounts. 140 These were multi-barrelled medium or heavy mortars firing rocket projectiles that could deliver substantial barrages quickly accompanied by a distinctive, unnerving shrieking noise. Anthony Bashford found them 'really quite demoralising'. 141 The British, despite their generally superior artillery, had no equivalent until the appearance of the Land Mattress system in November 1944. 142 German LMGs had substantially higher rates of fire than British equivalents. Often referred to by the British simply as 'Spandaus', 143 they were two different machine guns, the MG 34 and MG 42, which could both be used in medium or light roles. The table below indicates the advantages the weapons conferred. 144

¹³⁸ Every veteran interviewed by the author for this study mentioned this to varying degrees and with different emphases. See also Hastings, *Overlord*, pp. 234-7 and French, *Churchill's Army* p. 207.

¹³⁹ Literally a 'smoke launcher' from the weapon system's origins as a device for putting down smokescreens or poisonous gas.

¹⁴⁰ Anthony Bashford, 12907, Reel 3 and Stewart Irwin, 18210, Reel 2, IWM Sound Archive.

¹⁴¹ Bashford, ibid.

¹⁴² Canadian War Museum, Fact Sheet No.4. The Land Mattress. Friends of the Canadian War Museum.

¹⁴³ Common in most war diaries and reports seen for this thesis; for example, 'Short Account of Operations, September-November' in WO 171/1327 (2 KRRC, 1944) and '44 RTR at Udem', Papers of FM Lord Carver, IWM.

¹⁴⁴ Data in this table is from Bruce Quarrie, *Encyclopaedia of the German Army in the 20th Century* (Patrick Stephens Ltd, Wellingborough,1989), George Forty, *Companion to the British Army 1939-45*, Kite, *Stout Hearts*.

Table 2: Relative Performance of British and German Machine Guns

		MG 34	MG 42
0 yds (550m)	2,187 yds (2000m)	2000m	2000m
500-520	450-500	800-900	1,200
2440 ft/sec (744m)	2440 ft/sec (744m)	755 m/sec	755 m/sec
	500-520 2440 ft/sec	500-520 450-500 2440 ft/sec 2440 ft/sec	500-520 450-500 800-900 2440 ft/sec 2440 ft/sec 755 m/sec

This discrepancy regarding light support weapons remained a problem for the British throughout the war, though significant remedial action was taken to increase their own firepower.

German tanks were also seen as markedly superior, as were most German anti-tank weapons. John Buckley has summarised the three main areas of criticism of British tanks as lack of armour, combustibility and lack of firepower. This appears to accurately reflect the opinions of many veterans, including those who served in tanks, as well as the well-known campaign of the MP Richard Stokes in 1944 and 1945. There had been well-documented issues with some British tanks early in the war involving both their mechanical reliability and their combat effectiveness, and these had been thrown into stark relief in North Africa. However, later British designs and the new American ones were significantly better. Even so, Carver's comments regarding German armour in the summary of Operation JUPITER illustrate that even a hard-headed professional with a deep

¹⁴⁵ John Buckley, British Armour in the Normandy Campaign 1944 (2004) Cass, Abingdon

¹⁴⁶ John Buckley, *Monty's Men* (2013) Yale University Press, London p.39.

¹⁴⁷ French, *Churchill's Army* p.98-100.

¹⁴⁸ Buckley, *Monty's Men* p.39-40.

interest in armoured warfare felt the British were under a distinct disadvantage. The following table illustrates some of the issues. 149

Table 3: Relative Performance of Selected British and German Anti-tank Weapons

	Effective Range (against AFV targets)	Projectile Velocity (metres per second)	Armour Penetration (at max effective range) ¹⁵⁰
QF 17pdr anti-tank Gun with APDS ¹⁵¹ round	3,050 metres	883 m/s	162mm
QF 6pdr anti-tank Gun with APDS round	1,500 metres	822 m/s	108mm
PIAT	105 metres	100 m/s	100mm
8.8cm Flak 37 with PzGr round (AP)	14,000 metres	840 m/s	90mm
PAK 40 (75mm) anti- tank gun with PzGr 40 round (AP)	1,800 metres	933 m/s	154mm
Panzerfaust 60	60 metres	45 m/s	200mm
Panzerschreck (<i>Raketenpanzerbüchse</i> 54)	150 metres	110 m/s	216mm

The impression that all German tanks were more heavily armed and armoured was widespread (and remains so in much of the 'popular' literature). However, it is a matter of irrefutable fact that this was not the case with the majority of the German tank fleet¹⁵² and that even the larger late-war

¹⁴⁹ Data in this table is from Bruce Quarrie, *Encyclopaedia of the German Army in the 20th Century* (Patrick Stephens Ltd, Wellingborough,1989), George Forty, *Companion to the British Army 1939-45*, Kite, *Stout Hearts* and https://nigelef.tripod.com/anti-tank.htm, [retrieved February 15th, 2023]. Where there were variations in the data provided, a mean average was used.

¹⁵⁰ Versus rolled homogenous steel at a 90-degree angle, e.g., flat/vertical. It is important to note that all these would have been higher at much shorter ranges and that sloped surfaces greatly reduced penetration.

¹⁵¹ Armour Piercing Discarding Sabot, introduced early in 1944.

¹⁵² Buckley, *British Armour* pp.106-07 and 120. Panzer IVs greatly outnumbered Tigers, and to a lesser degree, Panthers, at most times in the West. Indeed, Panzer IIIs were still widely used in Italy.

tanks such as the Tiger and Panther, although unquestionably formidable, had significant deficiencies. Compared to British and American models (certainly those from 1943 onwards) in terms of their mechanical reliability and the ease of their repair and maintenance, the Tiger and Panther were inferior. 153 Nonetheless, these tanks, not unreasonably, cast a long, menacing shadow in British perceptions. The sense that almost every enemy tank encountered or suspected was a Panther or, especially, a Tiger, was a well-documented problem, and veteran accounts and the war diaries support the idea that 4th Armoured Brigade was no different in this regard. 3 CLY's war diary for June to August 1944 records that far more Panthers and Tigers were knocked out or damaged than the significantly more numerous Panzer IVs. 154 This seems unlikely. Veteran accounts used for this study (both from tank crews and others) reiterate the same points about 'Ronsons', 155 the thinness of British tank armour and the superiority of German armour generally as well as their light support weapons and anti-tank guns. 156 Additionally, it appears there was an overall belief, widely held, that the Germans were a more militaristic people by dint of some unique, intrinsic cultural factor and that their armed forces were far better prepared for the war. 157 Both positions are dubious and largely based on clichés and misunderstandings, although there is definitely a small kernel of veracity at their centre.

Certainly, Germany had begun preparing for a major war before Britain.¹⁵⁸ In addition, in Germany, the armed forces were imbued with a higher status and social standing, a factor with its roots in early modern German society¹⁵⁹ but one which was fiercely played upon and reinforced by the Nazi

¹⁵³ Well documented; see, for instance, Kite, *Stout Hearts* p. 379, Buckley, *British Armour* pp.118-19 and French, *Churchill's Army* pp.104-105.

¹⁵⁴ WO 171/855 War Diary of 3 CLY (1944), and see Buckley, *British Armour* pp.106-07, 120.

¹⁵⁵ After the well-known brand of lighter, a reference to the alleged combustibility. A phrase mentioned by George Fraser, 20816, IWM Sound Archive and Tony Rampling, researcher interview.

¹⁵⁶ Interviews with Douglas Browne and Tony Rampling (Researcher) and Anthony Bashford (IWM).

¹⁵⁷ See, for instance, Allport, pp. 228-30, Buckley, *Monty's Men* pp. 297-98 and French, *Churchill's Army* pp.132-35.

¹⁵⁸ Lloyd Clark, Blitzkrieg pp. 26-29.

¹⁵⁹ Nicholas Stargardt, *The German Idea of Militarism: Radical and Socialist Critics 1866-1914* (Cambridge: CUP,1994) and Paul Fox, *The Image of the Soldier in German Culture, 1871–1933* (London: Bloomsbury, 2017).

government. That government also expended huge amounts of money and effort on propaganda. This was not lost on British soldiers; Anthony Bashford stated, "I think they had different motivation ... We were a democracy ... they had this indoctrination ... they were highly motivated, most of them." He also felt that "[t]hey had faith in their weapons", implying this was not always the case for the British. Another veteran stated that the German Army of 1939–45 was "probably one of the finest armies the world has ever seen ... As a fighting machine they were very, very good." Another suggested, "The average German was much better than ours ... he was a better soldier ... I was a bit disappointed with the spirit of some of our blokes." Make a clear distinction between more and less motivated German units, saying that "some units ... weren't all that good ... but their Panzers ... [and some of the infantry] ... were very good." He noted that there were people from occupied countries who seemed less keen on fighting and often surrendered or ran away quite quickly but that many units were "ready to die ... it was for the Fatherland sort of thing". He felt that the most resilient German units the brigade encountered were the Waffen-SS formations in Normandy and Holland during 1944 and the Marines in Germany in the spring of 1945. The accounts of these periods of fighting support his opinion.

A pivotal issue for all British and indeed Allied forces in Italy and North-West Europe was that the burden of going forward was theirs. The wider strategic position dictated that the Wehrmacht remained largely on the defensive between 1943 and 1945, with all the advantages that that conferred in most circumstances at the tactical and operational levels. David French has written that the Germans 'practised a highly effective defensive doctrine'. ¹⁶⁴ As the last chapter demonstrated, they made good use of the topography and maximised the advantages given by their high-quality light machine guns, mortars and anti-tank guns. ¹⁶⁵ One consequence of this was the continued

¹⁶⁰ Anthony Bashford, Reel 3, 12907. IWM Sound Archive.

¹⁶¹ Patrick Victory, Reel 3, 10896, IWM Sound Archive.

¹⁶² Harry Rawlins, Film 3, Legasee.org.uk.

¹⁶³ Charles Lewer, interview with the researcher.

¹⁶⁴ French, *Churchill's Army* p. 240.

¹⁶⁵ French pp. 240-41.

perception of German military superiority along with a series of arduous and slow-paced operations which put great stress on British morale. Yet, importantly, this does not reveal the whole story for all formations, and particularly not where 4th Armoured Brigade was concerned.

One vital factor remains to be considered. The previous experience of the formation meant that the brigade's soldiers knew they could beat German forces, not simply on occasion but consistently and decisively. By the time the brigade landed in Italy its units had been involved in three years of fighting in North Africa, which was 'where British and Commonwealth forces learnt how to defeat the Wehrmacht'. 167 Devine argues that this campaign 'allowed the British to become familiar with German fighting methods and ... develop techniques to deal with them'. 168 This is a strongly credible position. They had participated in the British Army's first major victories of the war and shared in Eighth Army's aura of success. The fighting in Italy was tough and typified by slow, slogging advances, but nonetheless, in the period spent there, the brigade continued to outfight the opposition, taking part in successful offensive operations at Termoli (breaking a German counterattack) and the contested crossings of the Trigno, Sinello, Sangro and Moro. 169 As part two showed, there is strong evidence that the brigade learnt from German methods and became adept at either mitigating them or using these themselves. As already discussed, several times, there were other experienced formations in North-West Europe; not all of these performed effectively and some had their morale criticised. 4th Armoured Brigade was not one of these. Effective training based on recent experience and informed by realistic assessments of enemy capabilities was crucial, as demonstrated in part two. Of course, not every man had been in North Africa by the time the brigade landed in Normandy, and even less so by the end of the war. Nonetheless, a strong organisational memory was kept alive by the significant veteran cadre and by the reiteration of

¹⁶⁶Buckley, *Monty's Men* pp. 297-98 and French pp. 283-85.

¹⁶⁷ Jonathan Fennel, 'Steel My Soldiers Hearts: El Alamein Reappraised', in *Journal of Military and Strategic Studies*, Vol.14, Issue 1 (2011) p.1.

¹⁶⁸ L.P. Devine, *The British Way of War in Northwest Europe 1944-45*, location 807 (Kindle edition).

¹⁶⁹ '4th Armoured Brigade in Italy' (December 1943) gives an overview of operations in the preceding months contained in WO 169/8861 Brigade HQ (1943) TNA, Kew.

these previous experiences in orders of the day and training memoranda issued by the brigade's senior leadership. 170 It is the vital role of that leadership element in shaping morale that needs to be explored next.

Confidence in leadership

Part one of this thesis considered leadership in depth and the role of leadership in promoting confidence and trust was demonstrated. This chapter has already shown the importance of trust in both peers and leaders as crucial to maintaining and boosting morale. What follows here will examine the manner in which elements of leadership specifically intersect with morale and motivation. The fact that there is a connection between morale and leadership is very well established and has already been noted throughout this work. There is a very explicit statement about this from Brigadier Carver in the brigade's 1945 war diary. An order of the day addressed to all officers and NCOs of the formation issued on the anniversary of his taking command states that 'the success of our operations and the high morale of the brigade have been abundant proof of the high qualities of leadership you have displayed'. 171 British unit and formation commanders understood the need to support and manage morale. Training focussed on morale given to officers was in fact one of the areas where the British Army can be seen to have made sustained and serious efforts, even if individuals still sometimes 'got it wrong'.

During the war, the army issued two training documents aimed at junior officers which focussed on morale, The Soldier's Welfare 172 and Comrades in Arms. 173 Drawing on lessons learned from 1914

¹⁷⁰ See Carver's Order of the Day (06/05/1945) in WO 171/4314 (Brigade HQ) 1945 or WO 169/9332 3 CLY War Diary 1943 (Nov) for Brigadier Currie's message to the regiment congratulating all on their recent performance and drawing attention to recent awards.

¹⁷¹ Carver, Order of the Day (27/06/1945) in WO 171/4314 Brigade HQ (1945) TNA, Kew.

¹⁷² The Soldier's Welfare (2nd edition): Notes for Officers, 1943 (London: The War Office, 1943).

¹⁷³ Comrades in Arms: Three Talks to Junior Officers to Officer Cadets to assist them in the Handling of their men (London: The War Office, 1942).

to 1918 and the war in North Africa, these pamphlets covered key areas for platoon, company and battalion leaders to pay attention to. *The Soldier's Welfare* cited leave, food, health, sexual behaviour, sports and games, the NAAFI/other canteens, and domestic problems as areas of concern for officers. *Comrades in Arms* added the importance of 'keeping friends together and grouping men carefully'.¹⁷⁴ In addition, new officers received some training time specifically dedicated to welfare, and this was supposed to be reinforced within units through the guidance of more senior officers. As with so many other areas, the quality of this guidance varied enormously. Obviously, there is a complex mix of factors at work in the way that leaders' actions enhance morale and measuring impact could be difficult. However, a modern study offers some answers.

A large-scale study carried out in the Canadian Army in 2003 concluded that 'the results show that morale and cohesion influence confidence in leadership, and that both variables influence strain experienced by soldiers on operations. This points to an important role for leaders in the maintenance of morale and cohesion.' This study also noted (drawing on a number of others, including Stouffer's from the Second World War) that officers consistently overrated the morale and cohesion of their troops. The importance of being able to make realistic assessments of morale and an ability to actively engage with the mood of followers has always been vital to leaders.

The long-term maintenance of high, or at least adequate, morale was difficult. The examples of other 'Desert Army' formations such as 51st (Highland) Infantry Division and 7th Armoured Division, which were noted for their strong morale in 1942 and 1943, and then for their apparently poor, or at least barely adequate morale, in 1944 and 1945, show this very clearly. Lt. Col. Sparrow's 1946 monograph on morale listed confidence in leaders/commanders as a critical factor within morale.¹⁷⁶

¹⁷⁴ Bielecki, p. 399.

¹⁷⁵ K. Farley and J. Veitch, 'Measuring morale, cohesion and confidence in leadership: what are the implications for leaders?' In *Canadian Journal of Police & Security Services*, 1, (4), pp. 353-364, December 01. (2003).

¹⁷⁶ WO 366/22, pp. 5, 34-35. TNA, Kew.

As this chapter has demonstrated, this is a rational position and one that seems to offer some insight into the consistently good morale of 4th Armoured Brigade. Brigadiers Currie and Carver worked hard to instil confidence in both their immediate subordinates (the battalion/regiment commanders) and in the troops of the brigade more widely.

One recent study has explored leadership and morale with reference to 51st (Highland) Infantry Division. 177 In this, Anthony King states that the division went from being a well-respected formation with a record of successful operations to one widely regarded as poorly performing, a fact not generally contested. He argues that '[a]lthough a number of factors contributed to the struggles of the Highland Division in Normandy, there is little doubt that the shortcomings of its commander, Major General Charles Bullen-Smith, were the critical factor'. 178 King convincingly demonstrates that whilst casualties and difficult operational tasking had a negative effect on morale, other formations were able to cope under similar circumstances in the same campaign without becoming demotivated. The failings lay in Bullen-Smith's inability to manage morale, and this led to poor performance from the Division. By extension, this study argues that good leadership which actively managed morale was able to support performance. As King concludes, 'Under a poor commander, a division does not operate as a unified force and its troops are not motivated to fight. Good command and leadership turn a collection of units into a formation.'179 This echoes statements made by Montgomery during the war and which would have been well known to both Currie and Carver from their time working directly for him. Formation commanders had to 'create an atmosphere' within which everyone will 'live, work and fight' because 'the surest way to get high morale is to instil confidence'. 180 The commanders of 4th Armoured Brigade, and for the most part, the unit commanders within the brigade, can be seen to have engaged enthusiastically with these

¹⁷⁷ Anthony King 'Why did 51st Highland Division Fail? A case-study in command and combat effectiveness' in *British Journal for Military History*, Volume 4, Issue 1, (November 2017).

¹⁷⁸ King '51st Highland Division' p. 69.

¹⁷⁹ King, ibid p. 70.

¹⁸⁰ Bernard Montgomery, memo to 21st Army Group quoted in Anthony King, *Command* (Cambridge: CUP, 2019) pp.167-68.

concepts and generated the morale-strengthening atmosphere of confidence that Montgomery believed, almost certainly correctly, was key.

The deft handling of issues that would affect morale by the brigade's senior officers can be seen in the merger of 3rd and 4th County of London Yeomanry in July 1944. The amalgamation of units was frequently resented, even when from the same cap badge. ¹⁸¹ 4 CLY appears to have been in a state of poor morale after the fighting in Villers Bocage during Operation PERCH. The engagement was widely assessed to have been a defeat for the British, although the scale and impact of this defeat are subject to debate. ¹⁸² The level of casualties sustained combined with the questioning of the effectiveness of units within 22nd Armoured Brigade (beginning soon after the battle) eventually led to the decision to amalgamate 4 and 3 CLY and move another armoured regiment into the vacant place in 22nd Brigade.

Morale in 4 CLY has already been shown to have likely been somewhat poorer than in 3 CLY prior to the start of the Normandy campaign. It is not clear why that was the case; both regiments' war experiences up to that point were very similar. They were both TA regiments with near-identical social composition that had seen similar amounts of combat in the same theatres. Leadership at either the regimental or brigade level (or even both) was very likely a factor. There is evidence which suggests that after the Villers Bocage action there was a significant further slump in the unit's morale. John Cloudsley-Thompson was a troop leader in 4 CLY whose tank had been knocked out at Villers Bocage. He recalled that in early July, the crew of a tank in his troop told him, "We'd rather

¹⁸¹ See French, *Churchill's Army* p.145.

¹⁸² John Buckley, *British Armour in the Normandy Campaign 1944*, pp. 66-68, Carlo D'Este, *Decision in Normandy* pp.176-183 and *The Sharpshooter* (2003 edition) Newsletter of the Sharpshooters Yeomanry Association (Published London); the discussion throughout gives a flavour of the range of opinions concerning the battle

¹⁸³ See Boris Mollo, *The Sharpshooters* p. 40, Robert Kershaw, *Tank Men* pp. 331-32 and John Buckley, *British Armour in the Normandy Campaign 1944* pp. 25-7. It should be noted that 4 CLY's casualties were close to a fifth of their total manpower and almost a third of their available tanks; see WO 171/856, TNA, Kew.

have a court martial than go on"; these were experienced men, he notes. He persuaded them to keep going but admits "everyone was jittery". 184 Patrick Victory, an officer from 5 RHA who was attached to 4 CLY reported a similar atmosphere and believed it was in part because the division "was not tuned up to the conditions", 185 suggesting that the Norman terrain and intensity of operations there had a disconcerting effect.

3 CLY had also suffered significant casualties during its roles in EPSOM and JUPITER shortly after Villers Bocage and sustained 37 personnel killed, wounded or captured during that period. 186 Rebuilding units mauled in Normandy was becoming problematic. 187 This fact was openly acknowledged by Montgomery in a letter he wrote to the CO of 4 CLY explaining the decision. 188 It was assumed that Lt. Col. Sandy Cameron of 3 CLY would take over the new unit. He had commanded his regiment for two years and 'had served for four years in the 4th and had such an outstanding record as a Territorial Army officer'. 189 However, just as the amalgamation was announced, he was removed on Brigadier Carver's orders, as discussed earlier. With great adaptability and organisational skill, Carver and the brigade and regiment HQs were able to capitalise on this by building up what was effectively an entirely new leadership for 3/4 CLY. The numbering of the unit was important and showed tact and an understanding of cohesion; neither number 'disappeared' and a new number for both was eschewed. Key to this rebuilding was the use of a new CO who was, in effect, from outside of both 4th and 22nd Armoured Brigades, Lt. Col. Bill Rankin. Rankin had in fact replaced Viscount Cranley as commander of 4 CLY, who had been captured at Villers Bocage, but he had only taken over the regiment days beforehand. Bill Rankin would remain in command of 3/4 CLY until he was seriously wounded in late February 1945.

¹⁸⁴ John Cloudsley-Thompson, Reel 8, 31558, IWM Sound Archive.

¹⁸⁵ Patrick Victory, Reel 3, 10896, IWM Sound Archive.

¹⁸⁶ WO 171 / 855 War Diary of 3 CLY (1944) TNA. Kew.

¹⁸⁷ See Buckley, Monty's Men, pp. 23-4 and Hart, Colossal Cracks, pp. 44-54.

¹⁸⁸ Letter from Montgomery, dated 17th July 1944, appended to WO 171/856, TNA, Kew.

¹⁸⁹ Carver, Out of Step p.195.

It seems unlikely that, initially at least, Rankin would have been Carver's ideal choice for the role. He was born in 1909 and entered the army in 1929; he was thus six years older than Carver with several years more of peacetime service and he served in an old and established cavalry regiment (15th/19th Hussars).¹⁹⁰ As already seen, these were all elements likely to attract Carver's mistrust and disapproval. However, his 'peacetime' service had included a period on the North-West Frontier in India. This was regarded as one of the toughest and most demanding colonial postings.¹⁹¹ He had also fought with the BEF in France in 1940 and had been mentioned in dispatches in 1942 whilst seconded to another regiment.¹⁹² These kinds of credentials were important in producing both acceptance and confidence. It seems that both Carver and the personnel of 3/4 CLY soon regarded Rankin as a good leader.¹⁹³

The war diary of 3/4 CLY¹⁹⁴ records regular visits from the brigade commander in late July and three days of meetings to address the issues of the merger. It is also notable that Lt. Col. Cameron addressed the entire regiment to explain why the changes were necessary even though he was no longer CO. Cameron also participated in the meetings regarding the amalgamation. This shows tremendous personal fortitude and patience, alongside loyalty to his unit, on Cameron's part, who must have still been smarting from the indignity of his removal.¹⁹⁵ Tank crews were kept together wherever possible and some troops within the new squadrons were 'carried over' from the old regiments.¹⁹⁶ In fact, 'A' Squadron 3/4 CLY was mainly composed of 3 CLY soldiers whilst 'C'

¹⁹⁰ Quarterly Army Lists, Part One, 1940 and 1944.

¹⁹¹ Richard Holmes, Sahib (London: Harper Collins, 2005), pp. 86, 287-88.

¹⁹² Supplement to the London Gazette, 29th September 1942.

¹⁹³ Carver appears positive about him in *Out of Step*, a book in which he was very happy to air grievances. The CLY regimental history (Graham) is likewise favourable in its account. Veteran interviews used for this thesis also contain no criticism.

¹⁹⁴ WO 171 / 855 War Diary of 3 CLY (1944) TNA. Kew.

¹⁹⁵ He was subsequently sent to be commandant of a training establishment (Blackdown pre-OCTU).

¹⁹⁶ Andrew Graham, *Sharpshooters at War* (London, The Sharpshooters Regimental Association, 1964) pp. 204-207.

Squadron was mostly 4 CLY with only 'B' and HQ Squadrons being fully mixed. 197 Significant numbers of newly arrived soldiers in 3 and 4 CLY were moved to other armoured units to ensure that no veterans were forced to leave. 198 This last decision was an obvious variant of the traditional British workplace rule of 'last in, first out'. However, these new troops were all moved to other units within 4th Armoured Brigade. 199 It is clear that issues of continuity and trust were not ignored and were in fact managed carefully. As already seen, the compulsory moving of troops between battalions, even of the same cap badge, was often resented. In Italy in 1944, the disbandment of 6th Battalion Grenadier Guards led to substantial drafts being sent to 5th Grenadier Guards.²⁰⁰ Shortly after this, 5th Grenadiers saw a sharp rise in absentees, although the battalion, and the regiment generally, usually had low levels of all discipline offences; the majority of those involved were disgruntled ex-6th soldiers.²⁰¹This illustrates how the loyalty/identity structure, central to morale and cohesion, could be undermined by such reorganisations with the possibility of there being some effect on the functional structure as well. Moving soldiers around inevitably meant some of them went into different or new functional roles and this could cause friction. Despite the huge potential for significant morale-related issues, no contemporary documents seen for this thesis show anyone questioning 3/4 CLY's reliability or performance after the merger, and levels of absence and desertion remained low.

Part Three Conclusion

Morale, motivation and cohesion are deeply interconnected and are influenced by a large array of factors. The effect of fluctuations in morale, motivation and cohesion on a formation's or a unit's ability to fight effectively was highly significant. Part three of this work has comprehensively demonstrated that a confident unit or formation is more likely to show greater resilience and to act

¹⁹⁷ Graham, Sharpshooters, p.205.

¹⁹⁸ Anthony Bashford, Reel 3, 12907 and George Fraser, Reel 1, 20816, both IWM Sound Archive.

¹⁹⁹ Ibid. Bashford transferred to 44 RTR and Fraser to GREYS.

²⁰⁰ Bielecki, pp.199-200, drawing on the relevant war diaries and a veteran account.

²⁰¹ Bielecki, ibid.

boldly. It will also be able to muster more personnel because fewer of its soldiers are lost to the variety of difficulties that are clearly linked to poor morale, namely desertion, accidental injury and minor illness. Cooperation between sub-units and individuals is conducted more effectively because of mutual trust and shared norms and values. These factors very clearly support two of the fighting effectiveness metrics set out for this study: 'The ability to achieve tasks allocated where they are achievable' and 'the ability to maintain morale and motivation throughout these actions'. From the autumn of 1943 until the end of the war, the brigade's morale went through peaks and troughs. However, it was never worse than adequate, that is, sufficient to keep it in the field and functioning, and was often good. This can be demonstrated both via the statistical methods used at the time which are still a reasonable proxy for morale and via the opinions of those who served either in or alongside the brigade, including senior commanders who plainly regarded the brigade as reliable.

The six principal morale 'inputs' all had varying effects on the brigade between 1943 and 1945 but none of them caused the severe negative 'outputs' seen in some other formations, and some of the inputs had a marked positive effect on the brigade's morale and motivation. Active management of morale at unit and formation levels by experienced and capable officers via tried and tested methods developed in 1942 and 1943 was assisted by a strong formation identity that evolved over time and which enhanced cohesion and motivation. Many of these inputs relating to morale are, perhaps, in what one might term the realm of marginal gains, a theory that emerged from coaching in elite sport, though it now has been given wider applications.²⁰² The concept is that by developing and exploiting numerous very minor advantages or improvements, a team or individual can create, overall, a significantly improved performance in domains where there is strong competition. This is in fact very likely a factor within many elements of fighting effectiveness, and this work will return to the idea, but when exploring morale and motivation this seems to be particularly important. Multiple inputs with varying outputs shaped this, some by deliberate action, others more by chance. There

²⁰² David Hall, Derek James and Nick Marsden, 'Marginal gains: Olympic lessons in high performance for organisations' in *HR Bulletin: Research and Practice* 7.2 (2012): 9-13.

was perhaps an element of luck in that the brigade was never committed to a prominent or substantial role in any of the British Army's (relatively few) significant operational failures during the period between 1943 and 1945; as discussed, the absence of major defeats was an important factor in upholding or boosting morale.

In June 1946, 4th Armoured Brigade had just begun settling into the peacetime role of a garrison in Northern Germany. Brigadier Carver produced the '4th Armoured Brigade Morale Plan', 203 a document that effectively distilled what had been learnt from the last few years of active service by Carver and his colleagues leading the brigade. He highlighted the importance of discipline including both self-discipline and organisational discipline as well as training and the welfare of the men. It is not surprising that this is similar to Sparrow's conclusions, although Carver is highly unlikely to have seen Sparrow's report when he was writing the 'Morale Plan'. Both drew on similar lessons and learning and sought to outline what we would now call best practice. The important element here is that the brigade did not just pay lip service to this best practice, certainly from the latter period in North Africa onwards; it actively both followed and developed it, maintaining strong morale which helped to sustain or sometimes increase fighting effectiveness. Robust and resilient morale meant that units were less likely to collapse under the pressures of battle and that they were far more likely to accomplish their allocated tasks. Additionally, as these two chapters have shown, good morale ensured that more troops within a formation were available to either fight or carry out support functions because fewer soldiers were absent, ill or suffering from battle exhaustion. As the examples and statistics used have shown, 4th Armoured Brigade maintained at least functionally adequate, and usually good, morale throughout the period, and this enhanced its fighting effectiveness.

²⁰³ '4th Armoured Brigade Morale Plan' (June 1946) Papers of FM Lord Carver (IWM) Box1, File 4.

Conclusion

This thesis has considered the generation and maintenance of fighting effectiveness within 4th (Independent) Armoured Brigade, the impact of this on the brigade's operations and the relative levels of effectiveness compared to other British formations and their opponents. At the beginning, this work posited three areas for investigation in seeking the principal drivers of fighting effectiveness. It has considered leaders and leadership, tactical methods and their modification through lesson-learning processes, and morale and cohesion within 4th Armoured Brigade. This examination has been within the period commencing at the start of the Italian campaign and running up to the end of the war in Europe. The thesis has demonstrated that each of these factors influenced the fighting effectiveness of the brigade, as they did for other formations. With 4th Armoured Brigade, it has been shown that the formation's performance, within each of these areas, was never worse than the average for the British Army in the Mediterranean or North-West Europe and it was, at times, in some areas, a clear outlier in terms of exceptional performance.

The reality of the performance of units within Eighth Army in Italy and 21st Army Group in North-West Europe is more complex than is often allowed for. As this study agued in its introduction, the British Army of the 1939-45 period was a many-faceted organisation with strong and varied 'tribal' traditions. Individual parts of the army had far more control over training, leadership methods and ethos in general than is the case in the British Army today and also for many of its peers between 1939 and 1945. Generalisations about its morale, professionalism and organisational culture should be made with great caution. The lack of centralised training, the often vague doctrine and the influence of the regimental system all encouraged the growth of localised organisational cultures. This was compounded by the dispersed nature of British forces between 1941 and 1943. The evolution of differing approaches to tactical methods and how to lead was widespread.

Leadership and leaders were, and remain, a critical factor within warfare. The three results of effective leadership, relevant to this study, were identified in part one: the maintenance of more robust morale and cohesion, the retention of good discipline and a rapid decision cycle, this last element being linked to competence and confidence. It is clear that effective leadership can exist at some levels and not at others but that more effective senior leaders will influence the spread of 'good' leadership throughout a formation. The personal impact of both John Currie and Michael Carver was decisive. Within 4th Armoured Brigade, it has been demonstrated that there was strong leadership from officers relying both on the traditional style based on bravery and paternalism and on followers' faith in their capabilities as professional soldiers with good levels of technical skill. Professionalism was embraced as part of the climate produced by Currie and Carver, although, as the thesis has shown, the regimental traditions of some of the brigade's component units reinforced this. In addition, strong leadership was delivered by NCOs who were able to take over in the absence of officers; these still included a substantial number of pre-war regulars and Territorials. NCOs and officers also largely showed sound tactical leadership, and this links to another important factor which has been considered here.

Armed conflict is unequivocally an adaptive and responsive activity. This applies to tactical methods, weapon, vehicle, and communication technology and to organisational structures. There is a constant and lethal dialectic with the enemy. The connected abilities to fight, learn and adapt were, and indeed still are, key to producing fighting effectiveness. Part two of this thesis demonstrated that British procedures in place to 'lesson learn' at the tactical level during the Second World War were unsophisticated and not always particularly effective. Learning lessons and revising tactics as a result was understood to be important. It was encouraged across the army but the structures and processes in place were very limited.¹ At brigade level, much depended on the enthusiasm and intellectual rigour of individual officers within units and the brigade HQ. However,

¹ The DTI and individual formations produced scores of 'lessons' reports between 1943 and 1945 as demonstrated throughout this work.

where these criteria were present, over time, robust learning processes could take place which resulted in changes to tactical methods and units' and brigades' organisational structures. Perhaps surprisingly, it has been seen that formation commanders had considerable freedom to act in these areas.

For 4th Armoured Brigade, as with other independent armoured brigades, the ability to cooperate effectively with infantry was a critical tactical area and one that proved to be problematic: 'British armour was frequently unable to deliver the kind of support it was intended to provide.' Certainly, this was an area where, it can be seen, the brigade expended considerable time and effort in seeking solutions during the entire period considered. The development of small, highly mobile Tac HQs, assisted by upgraded radio communications, improved the workings of command and control across the army, but 4th Armoured Brigade engaged particularly creatively and effectively with this idea from the period in Italy onwards. This kept the brigade commander's grip nearer to the fighting and helped develop a clearer picture of what was happening. As this thesis has shown, this came with great risk; John Currie was killed in Normandy and, later, Michael Carver was both wounded and subsequently almost captured. However, the operating method was seen as a risk worth taking as it made decision cycles faster and more accurate.

The morale and motivation of the brigade's troops were consistently better than the average across 21st Army Group. 'Better' is a wide category and would include, at certain times, in some units, morale that was only just adequate to continue fighting but clearly morale was generally resilient.

This study has attributed this to a mixture of factors: a strong loyalty/identity structure based around

² Devine, location 3944 (Kindle edition).

³ See, for example, 4th Armoured Brigade in Italy', p.13. WO 169/8861, in the responses to 'Training Memo No. 2', 4th Armoured Brigade Papers, Tank Museum, Bovington and in 'Operations East of the Aller', pp. 25-28, Papers of the GREYS, RSDG Museum, Edinburgh.

⁴ See the sections on this issue in '4th Armoured Brigade in Italy', Papers of the GREYS, RSDG Museum, Edinburgh.

the regiments that the brigade was composed of and their traditions but also a shared brigade identity which grew increasingly influential with time. Good cohesion and strong primary groups existed as a result of prolonged periods of manageable casualty levels which were only punctuated by a few short periods of heavy casualties. The brigade's large veteran cadre was a powerful influence within the formation, and whilst it has been shown that this had some problematic effects, on the whole, the group helped to cement cohesion within units. Veteran officers and senior NCOs were particularly important as they had the credibility and experience that created an atmosphere of confidence which increased the will to fight. Conversely, the fear of death or serious wounding was a powerful force that reduced the will of soldiers to fight. This was natural of course and was driven in large parts by the levels of casualties sustained. In the studied timeframe, there were three distinct periods of higher casualty levels. These were the Sangro fighting, Normandy and the fighting in the north-west of Germany in early 1945. None of these lasted long enough to have a decisive effect on morale and were not close enough together to have a cumulative effect either. The other factors that had an impact on morale and motivation have also been shown to have worked positively.

The logistical and medical support provided to and by the brigade was excellent. The thesis has shown that veteran accounts and contemporary reports reveal no shortages of operationally important supplies at any point and that the wounded were well cared for. Soldiers were confident they would always get fed, have ammunition and fuel and receive post from home. They also knew that if they were injured, sick or subject to psychological breakdown, they would be suitably looked after. This was not, as discussed earlier, unusual in the British Army of the period. Logistics and medical support were areas in which the British excelled, as is now well recognised. However, the way these elements were arranged within armoured brigades gave them a small advantage over other types of British formation. The flexibility achieved by the increased numbers of vehicles

⁵ Kite, p. 290, French, *Churchill's Army*, pp. 120-21 and Allport, p. 207.

allowed the formation to be particularly agile around its logistical arrangements, a skill further honed by long periods of active service. It is in comparison to German formations that this area produced the greatest impact. The thesis has shown that in every theatre and operation that the brigade engaged in, German forces suffered from significant logistical issues and these had a direct influence on their fighting effectiveness.

This work has demonstrated throughout that the Wehrmacht presented a formidable enemy for the British Army during the Second World War. The German forces, as a whole, possessed certain key advantages that pertained in almost every time and place. These might be summarised briefly as superior tactical doctrine, realistic training that actively supported this doctrine and reinforced fighting skills, and an advantage in certain, specific types of firepower. This was particularly the case regarding light support weapons (mortars and LMGs/MMGs) in infantry units and anti-tank weapons across all of the arms in several forms: towed and self-propelled AT artillery, main guns on tanks and handheld infantry weapons. Additionally, the Germans developed exceptionally effective methods for maintaining morale and motivation within units. Cohesion and the will to fight were held up by draconian discipline, pervasive propaganda and the effective use of highly experienced veteran cadres. However, by examining the opponents that 4th Armoured Brigade faced across the period, a far more nuanced and textured picture emerges.

The slice of the Wehrmacht's forces considered here offers some critical points about the fighting effectiveness of both sides. In a similar way to the British Army, Germany's land forces consisted of many different military groups with differing characters and cultures. These were, as expected, dictated by role, history and composition. The material discussed in the thesis should be viewed alongside Appendix 3 for a fuller picture. The Germans' deeply ingrained tactical doctrine often obscures the profound variations that existed between formations. Some of these performed poorly, not just in the final months of the war when circumstances were immensely difficult for them, but

earlier on as well. The failings within *65. Infanterie-Division* and *16. Panzer-Division* in Italy have already been discussed. Poor morale was visible in the former and poor leadership and tactical command in the latter. Yet, even indifferently led and motivated German formations were able, in the short term, to offer highly effective resistance to Allied offensive operations. This was a direct result of the strengths outlined above. However, professionally skilled and well-led British formations, such as 4th Armoured Brigade, were always able to overcome these difficulties, albeit seldom immediately. Local terrain features, the weather and other random events all had a significant impact on the speed and effectiveness of the brigade's operations in ways that could either help or hinder regardless of the planning undertaken. This was outside of either side's control, and luck, good or bad, was clearly involved.

Luck and chance unquestionably play a role in warfare. Might it be that 4th Armoured Brigade was simply lucky? Whilst this certainly cannot be discounted as an influence, to attribute everything to chance would be ridiculous. In certain, specific, small incidences, one can clearly see how blind chance had a role. One thinks here of finding small bridges that could just about carry a tank or capturing the hapless dispatch rider from 16. Panzer-Division.⁶ The manageable casualty levels might be indicative of luck. Was the brigade simply fortunate not to be committed to numerous high-casualty operations or to have those they did participate in close together? It appears much more likely that something else was at play here. This was shaped by the attitudes of senior commanders towards the brigade. Carver's willingness to push back against orders that would incur high casualties has been noted. The factors underlaying his ability to do that will be considered shortly. In one particular area it does seem that luck perhaps played a significant role. This was the brigade's experience in Italy.

⁶ Doherty, Eighth Army in Italy, p.17.

4th Armoured Brigade's time in Italy was relatively unusual in comparison to that of most of the other veterans of North Africa. Almost all of the brigade's service was on the east coast, and whilst it entailed some heavy fighting it was not comparable with the bitter struggle around Salerno and the western end of the German defences along the Volturno. Progress to the east was faster and incurred, generally, fewer casualties. The brigade was withdrawn from Italy prior to the situation stagnating and the rate of advance slowing considerably. The other veteran formations from Eighth and First Armies had a variety of different experiences. 51st (Highland) Infantry Division and 8th Armoured Brigade did not go to Italy. 7th Armoured Division landed at Salerno and advanced up the west coast initially. 50th Infantry Division took part in the invasion of Sicily but was then sent back to the UK. 78th and 5th Infantry Divisions remained in Italy although 5th did eventually go to North-West Europe. The brigade's service in Italy thus fell within some form of grim 'Goldilocks zone' where casualties, operational difficulties and the actions of the enemy were not too severe but sufficient to impart relevant learning and experience. This provided a vital preparation for the intensive and ferocious fighting that followed D-Day. It particularly helped to develop officers within the brigade's HQ who were able to carry out effective planning and organisation at a rapid pace.

The influence of friendship groups, informal professional networks and nepotism cannot, as discussed, be ignored. Connections, primarily those made in North Africa during 1941 and 1942, can be seen to have had an influence within both Eighth Army in Italy and 21st Army Group in North-West Europe. The influence of particular groups is observable in the choice of formation and regiment/battalion commanders within both organisations. The brigade contained two units that were socially influential and seen as desirable regiments to serve in, certainly for officers. The King's Royal Rifle Corps and the Royal Scots Greys were 'smart' regiments that attracted well-connected upper-middle- and upper-class young men to their commissioned ranks. Regiments such

⁷ A term used in Astronomy to describe the area around a star potentially suitable for life as it is 'not too hot and not too cold'. https://exoplanets.nasa.gov/faq/15/what-is-the-habitable-zone-or-goldilocks-zone/ [Retrieved March 10th 2023].

as these were able to tap into influential networks amongst senior officers, a fact that is well attested.⁸ Networks could provide useful contacts for 'up and coming' officers if they were able to secure the support and mentoring of senior leaders.

Patronage was an important factor. Lord Bramall made some fascinating remarks during his interview with this researcher. He was very clear that in Carver's case, 'his patron was Montgomery', a result of his efficient work as a staff officer in both 7th Armoured Division and Eighth Army. Lord Bramall further added that Carver was 'probably responsible for me getting to where I did'. He was of course preceded as CGS by Roland Gibbs, an officer from the same battalion. Certainly, the influence of the 'Black Mafia' might be more than just a trope produced by cap badge rivalry. Carver, it should be added, was able to get away with quite startling insubordination at certain points. He drew the angry criticism of both Major General G.I. Thomas, commanding 43rd Infantry Division, ¹⁰ and Brian Horrocks, commanding 30 Corps. ¹¹ Lord Bramall recalled that Carver could be argumentative and difficult at times, including towards senior officers. 12 It seems he got away with this as a brigadier, and a newly appointed one at that, through the protection offered by patrons. The most important of these was very clearly Montgomery, although he seems to have had the support of other ex-Eighth Army figures within 21st Army Group as well. These included Lieutenant General Neil Ritchie, commanding 12 Corps¹³ and 'Pip' Roberts, GOC of 11th Armoured Division. 14 However, crucially, this support was conditional. In most cases, powerful patrons could not support the incompetent. The backing of these figures relied on continued effective leadership being provided by the individual. There are a number of much discussed cases where very well-

⁸ French. Military Identities, pp. 164-67, 169 and McCarty, 'Point of Failure', pp. 22-24.

⁹ Lord Bramall, interview with the researcher, 11/05/2012.

¹⁰ Carver, *Out of Step*, p.194.

¹¹Carver, ibid, pp. 203, 206.

¹² Lord Bramall, interview with the researcher, 11/05/2012.

¹³ Carver, ibid, pp. 204-205, 211-212. On both occasions Carver is given a rather performative and unchallenging 'telling off' by Ritchie. It is notable that Carver is full of praise for Ritchie in *Out of Step*, something he tended to reserve for those he had not had any friction with.

¹⁴ Roberts is another of those who receives unstintingly favourable coverage in *Out of Step*. Carver clearly approved of the way 11th Armoured Division was run and Roberts, in turn, gave Carver significant freedom when subordinated to 11th Armoured. 'Pip was a first-class commander,' p. 210.

connected veterans of North Africa with excellent past records were still sacked following repeated failings in North-West Europe. Notably these included Lieutenant General Richard O'Connor and Brigadier Robert 'Looney' Hinde. ¹⁵ Carver, like Currie before him, was able to maintain the confidence of his superiors.

There was evidently something about the way senior commanders at corps and army levels regarded the brigade that marked it out as particularly reliable, that is, very likely to perform its allocated tasks and also able to continue functioning under pressure without breakdowns in morale or discipline. The brigade was composed of 'tried and tested' units from established regiments with good reputations. Beyond this, it can be argued that cohesion within the brigade was assisted by the loyalty/identity structure for the men of these units, coalescing around both their units and the brigade. The long-term stable structure of the formation blended with its strongly defined identity ('Black Rats') and combined to give the brigade a cohesion lacking in many other formations. ¹⁶ Units within the brigade and the formation as a whole were repeatedly able to demonstrate a high-tempo decision cycle¹⁷ and good judgement. Currie was already displaying this in November 1943 with the Brigade's rapid multiple rewrites of the plan to attack across the Sangro in the face of unpredictable weather and concerted enemy action. His focus on remaining forward with a highly mobile Tac HQ allowed greater control of battles. His belief in, and push for, good-quality training enhanced the brigade's professionalism and skills. All of these factors led to an increase in fighting effectiveness. Michael Carver was then able to take deeper and more structural actions to improve the brigade's combat performance. This was undertaken via the effective capture and sharing of knowledge within the brigade through a uniquely broad and thorough effort. That process led to changes in the brigade's fighting methods, including the restructuring of some sub-units, and the evolution of an innovative battle group structure for the brigade's units and attached elements.

¹⁵ French, *Churchill's Army*, p. 253 and Fennell, People's War, p. 536.

¹⁶ Interestingly, a report in the 1945 2 KRRC war diary uses the term 'the rats' specifically to refer to the longer-served veterans of the unit. 'A Company Activities, February-March 1945' in WO 171/5212, TNA, Kew. ¹⁷ This was discussed in detail in part two of this thesis.

Ultimately, this thesis seeks to show how and why 4th Armoured Brigade generated high levels of fighting effectiveness and what this meant in practice. A number of significant engagements involving the brigade have been discussed throughout this work. Four of these will now be revisited and converted into a simple model that illustrates the elements of the specific fighting effectiveness metric set out in the introduction. The diagrammatic models show a comparison with the main opposing formation based on leadership, tactical methods, and morale, highlighting strengths and weaknesses. It also considers three key markers of tactical level success outlined earlier. These are the relative ratios of casualties (importantly, including prisoners), the start and finish positions of both formations and whether either formation was able to undertake further significant operations shortly after the battle. For 'shortly after' a rather arbitrary figure of within 3 days has been chosen. ¹⁸ The battles considered thus have had to be those not followed by any significant lull in fighting. This last point is important as it illustrates the metric defined as 'The ability to remain functional beyond these tasks by avoiding heavy losses in personnel or equipment', that is, was the formation considered ready to continue fighting after the particular battle?

¹⁸ This reflects the necessity to reorganise after a significant battle regardless of outcome even where this only involves bringing up further supplies of fuel and ammunition.

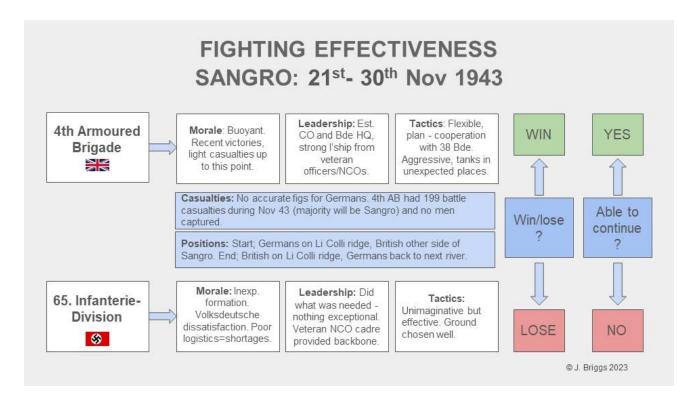


Figure 4. Fighting Effectiveness: Sangro

Additional British forces: 38th Infantry Brigade. A good working relationship was established.

Additional German forces: Elements of 26. Panzer-Division. Mainly SP guns and infantry.

Terrain and weather friction: High. River in flood, frequent rain/sleet/snow, very cold. Hilly, rocky area with dense scrub. Many steep slopes.

Tactical points: Germans made heavy use of minefields and prepared positions. Their advantage in light support and AT weapons was 'leant on'. British able to alter plans quickly and repeatedly.

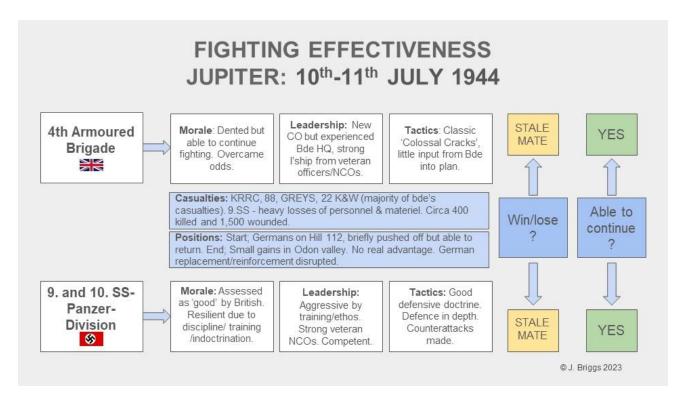


Figure 5. Fighting Effectiveness: Op JUPITER

Additional British forces: 43rd (Wessex) Infantry Division, unfamiliar to the brigade. Artillery support from 2 AGRAs and naval gunnery.

Additional German forces: 4th Armoured Brigade mainly engaged with *9. SS-Panzer-Division* but units of both German divisions intermingled. Artillery support from *Werfer-Brigade 8*.

Terrain and weather friction: Low. Mild, dry weather. Rolling farmland with some woodland. Several small villages.

Tactical points: Germans well dug-in, mainly in reverse slope positions. Notable for Carver's push-back re the GREYS. Disruption of German reinforcement/replacement had a significant long-term impact.

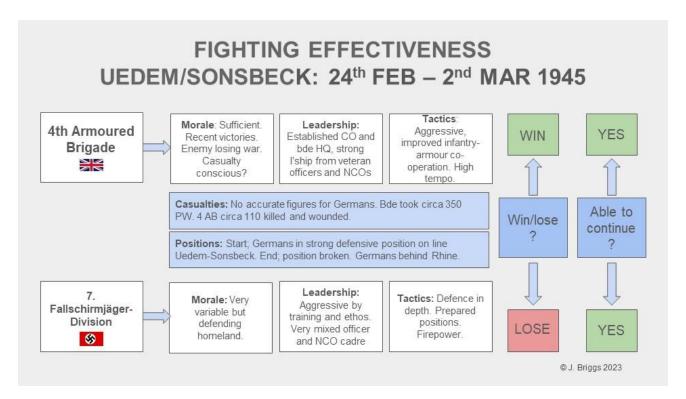


Figure 6. Fighting Effectiveness: Uedem/Sonsbeck

Additional British forces: Operating with elements of 159th Infantry Brigade.

Additional German forces: 7. Fallschirmjäger-Division identified as one of the main formations facing 4th Armoured in their own reports. Also identified were elements of the Panzer-Lehr-Division. Artillery support from LXXXVI. Armeekorps.

Terrain and weather friction: High. Cold and wet weather. Thick mud effecting cross-country mobility. Large areas of dense woodland with numerous farms and small villages around these.

Tactical points: Germans had pre-prepared defensive positions in great depth including anti-tank ditches and minefields. However, they were hampered by disagreements between corps commanders and OKW. British were flexible, co-ordinated, and operated at high tempo by day and night.

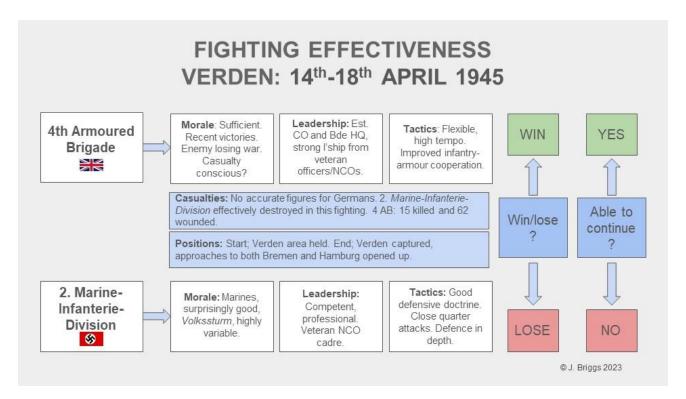


Figure 7. Fighting Effectiveness: Verden

Additional British forces: 53rd (Welsh) Infantry Division.

Additional German forces: Units of the *Deutsche Volkssturm*, the German equivalent of the Home Guard, *Kampfgruppe Grosan*, a mixed armour and infantry Heer formation (circa 3,000 troops) and some Flak units.

Terrain and weather friction: Moderate. Mild weather, well-drained soil and good roads but a congested landscape; areas of dense woodland and several large towns.

Tactical points: Germans still using good defensive doctrine. Forces dispersed, emphasis on close quarter attacks. Defence in depth. British: Flexible, high tempo of operations by day and night. Alternate thrusts. Use of 'calls to surrender' often effective.

These four examples each offer very different types of battle fought in dissimilar landscapes and against a variety of enemy forces. Some general reflections can be made about all four examples and indeed the other battles considered here. Warfare is confusing, brutal and unpredictable. Plans seldom survive contact with the enemy. The ability of commanders (at all levels) to modify, or even radically alter, plans when circumstances change is critical. Different landscapes and climates created different problems. The nature of these was sometimes predictable but often it was not. Prior planning and thorough training greatly reduced friction. Aggressive, fast-moving operations were potentially high risk but the brigade's experiences show that they often delivered victory at a

relatively low cost. A Pyrrhic victory is still a victory but that is not how wars are won, especially by democracies.

This thesis set out to explain how 4th Armoured Brigade generated and maintained fighting effectiveness and to consider if this was at a higher level than many of its peers and opponents, even if only by a narrow margin. Certainly, in some respects, as discussed earlier, this was akin to the modern idea of marginal gains. In an environment of pitiless competition, where everyone was seeking to improve their chances of survival and victory, multiple small improvements in different areas produced an overall advantage. However, in other respects, 4th Armoured Brigade exhibited an outlier status as a formation that developed and utilised innovative ways of working. It was not alone in this but was part of a small minority within the British Army of the period. As Charles Forrester has shown, there was a group of innovative formation commanders within 21st Army Group, and Michael Carver was one of these. It is interesting that he had a good relationship with Pip Roberts of 11th Armoured Division. Roberts was another innovator, and this can be seen in the way both formations operated together in the spring of 1945.

4th Armoured Brigade was not an elite formation; it did not recruit selectively or have a highly specialised role. It was not, in theory, any different to any other armoured brigade. However, this thesis has shown that over time it acquired a reputation for reliability and effectiveness that was very obviously acknowledged by senior leaders. This work has shown that the formation was unofficially used as a shock or breakthrough force from late 1943 onwards and never lost the confidence of theatre commanders in Italy or North-West Europe as other formations sometimes did. Whilst social connections and regimental networks certainly played a part, it is clear that the brigade's reputation helped secure the three chief of the general staff roles and the two chief of the defence staff roles. This was an unparalleled 'haul' of senior posts in modern British military history.

well led, had a strong sense of both unit and formation identity and actively sought to improve its fighting performance via lesson learning and training which led to tactical changes. In some areas the brigade showed genuine innovation; in others, it simply produced a 'best practice' iteration of what other formations were doing. The brigade thus acquired a reputation for skill and toughness that, although now faded, was widely recognised at the time. Chester Wilmot, in a BBC *Unit Spotlight* radio broadcast, said that "between Beda Fomm and the Baltic, the 4th Armoured Brigade has made more history than I have time to tell here". Those who had served in the brigade, as the oral history interviews and memoirs of its veterans have shown, were justifiably proud of having been Black Rats.

¹⁹ Transcript of *Unit Spotlight* broadcast, May 19th, 1945. 4th Armoured Brigade Papers, Tank Museum, Bovington.

Appendix 1: Structure and component units of 4th Armoured Brigade

Table 4: Composition of 4th Armoured Brigade: Italy

4th Armoured Brigade – Italy
3rd County of London Yeomanry
44th Royal Tank Regiment
46th Royal Tank Regiment
50th Royal Tank Regiment (Replaced by GREYS, December 1943)
'A' Squadron, The Royal Dragoons
2nd Battalion, King's Royal Rifle Corps
98th Field Regiment Royal Artillery (Surrey and Sussex Yeomanry)
5 Company RASC
14th Light Field Ambulance
318th Armoured Brigade Workshops REME
4th Armoured Brigade Signals Section

Table 5: Composition of 4th Armoured Brigade: North-West Europe

4th Armoured Brigade – North-West Europe
The Royal Scots Greys
3 rd , later 3/4 County of London Yeomanry
44th Royal Tank Regiment
2nd Battalion King's Royal Rifle Corps
4th Royal Horse Artillery
5 Company RASC
14 th Light Field Ambulance ¹
4th Armoured Brigade Workshops REME (previously 318th Workshops)
4th Armoured Brigade Ordnance Field Park Workshops
No 271 Forward Delivery Squadron RAC
4th Armoured Brigade Signals Section

¹ Removed from the brigade in February 1945.

Appendix 2: Methodology used on lessons documents comparison in Figure 4

Specific war diaries consulted: WO 171/613 8th Armoured Brigade HQ, NW Europe (1944) and WO 171/4327 War Diary of 8th Armoured Brigade HQ (1945), WO 171/668 147th Infantry Brigade HQ (1944). WO 171/4401 147th Infantry Brigade HQ (1945), WO 171/620 22nd Armoured Brigade HQ (1944), WO 171/4340 22nd Armoured Brigade HQ (1945), all TNA, Kew. WO 171/627 29th Armoured Brigade HQ (1944), WO 171/4345 29th Armoured Brigade HQ (1945), WO 171/708 214th Infantry Brigade HQ (1944), WO 171/4437 214th Infantry Brigade HQ (1945), WO 171/443 7th Armoured Division, G (1944), WO 171/4171 7th Armoured Division, G (1945), WO 171/553 53rd Infantry Division, G (1944), WO 171/4276 53rd Infantry Division, G (1945), WO 171/456 11th Armoured Division, G (1944), WO 171/4184 11th Armoured Division, G (1945).

The above collection is far from exhaustive. However, it does provide a relatively large sample group. It contains infantry and armoured formations of both brigade and division size and includes some where both the divisional and the component brigade diaries of a formation have been examined. The selection criteria were simple. Was the formation concerned part of 21st Army Group throughout 1944 and 1945 and did it have headquarters' war diaries available? Formations that had participated in many or all of the same specific parts of the NWE campaign were selected where possible. The war diaries were then checked for documents that matched the specific types set out in Chapter 2 and Figure 4. A brief mention here should be made of reports from recce and fighting patrols. Most (though still not all) war diaries have many of these; they are a type of after-action report. However, the decision was taken to ignore these except where a particularly large amount had been written and larger-scale (at least platoon/troop level) fighting had taken place. In general, the patrol reports are somewhat generic and it is unusual for them to contain specified elements of learning.

It is of course distinctly possible that some material of the types being counted here did not make it into the war diaries. The thesis has shown that the choosing of items appended to war diaries was down to individuals and varied considerably between formations. However, the use of a fairly large sample group should balance this out to a significant extent. One can see what the norms and averages were even if not all relevant material is captured.

The same processes underpinned the checking of DTI and DMO files. The researcher makes no pretence of having seen every file produced by either body, which would be a colossal undertaking, but a large number were viewed for this thesis. More DTI than DMO files were looked at. The aim was to identify where specific reports from formations were passed directly into DTI and DMO documents either in their entirety or as recognisable and significant summaries. This was done, as discussed in the main part of the work, to illustrate the passage of tactical learning from formations engaged in fighting to those parts of the army collating tactical learning. This sample does not claim to be anything like exhaustive, but again it provides an indicator of the ways in which some formations were most certainly providing more data for the DTI and DMO than others. Future research on this area would undoubtedly be fruitful and far larger sample groups would of course produce more robust data.

Appendix 3: German formations opposing the brigade: Brief histories and structural information

This appendix considers a selection of German formations that 4th Armoured Brigade fought against in 1943 and 1945. The aim of the appendix is to give additional context and background to the enemy forces discussed in the thesis. The choice of formations was influenced by three main factors. First, the availability of primary and secondary source material for the formations. Second, an effort on the researcher's part to show the range and variation of formations encountered. Third, the need to focus on formations that could be identified as having significant and prolonged fighting contact with the brigade, therefore enabling meaningful comparison. Consequently, three formations met the necessary criteria and are considered here.

This appendix will examine *65. Infanterie-Division*, *9. SS Panzer-Division "Hohenstaufen"*, and *2. Marine-Infanterie-Division*. These formations were encountered across the span of the period considered, with *65. Infanterie-Division* being fought in Italy in the winter of 1943, *9. SS Panzer-Division* in Normandy and then Holland during 1944 and *2. Marine-Infanterie-Division* in Germany in March and April of 1945. A first point to consider is that these were all, nominally at least, divisional-strength formations. The Wehrmacht and SS used very few brigade-strength independent formations for most of the war and those that did exist usually had specialised functions. However, as the thesis has shown, 4th Armoured Brigade was generally operating in support of infantry divisions or, when acting alone, with infantry and sometimes other units, loaned from larger formations. Additionally, later in the war, German divisions were often not much larger than British brigades.

This appendix should help to contextualise operations discussed in the main body of the thesis by setting successes, failures and actions leading to high or low levels of casualties and the pace of the brigade's movement against the capabilities of enemy forces. Whilst this has been attempted throughout the work, the additional material here, which would have been too large for the thesis itself, should add greater granularity and organisational context to the examples.

65. Infanterie-Division

The division was raised in July 1942 as part of *Welle* (mobilisation wave) 20.1 It was initially formed in occupied Alsace, which was then German territory. The division's war diaries have only survived in part and the period covering Italy is particularly fragmentary. Much of the content here thus relies on German corps-level reports, British and New Zealand units' war diaries and secondary sources. After training, much of the division's initial service was garrison duty in Belgium and Holland.2 Following the German defeat at Stalingrad, substantial numbers of the division's troops were used as reinforcements for another division which had suffered heavy casualties in the fighting there. Subsequently, *65. Infanterie-Division* was gradually brought back up to strength by large drafts of replacements, many of which were drawn from Silesia.3 During the summer of 1943, the division moved to France and then Italy. In October, it moved to the Winter Line, which included the area where Sangro battle would take place.

¹ https://www.lexikon-der-wehrmacht.de/Gliederungen/Infanteriedivisionen/65ID-R.htm [Retrieved February 15th 2023].

² https://www.feldgrau.com/ww2-german-65th-infantry-division. [Retrieved February 15th 2023].

³ Attested at https://handgrenadedivision.com/history.htm, [15/02/2023], which seems to draw on veteran autobiographies. It would align with the statements made by British forces.

As shown in the main part of this work, Allied intelligence assessed *65. Infanterie-Division* to be a fairly poor formation in terms of both its morale and its equipment.⁴ 4th Armoured Brigade did indeed receive a number of deserters from the division in November.⁵The division was under *LXXVI Panzer-Korps* and would receive additional resources from *26. Panzer-Division* during the Sangro fighting.⁶

65. Infanterie-Division performed somewhat better than the Allied forces engaging them expected. The division's units occupied carefully sited pre-dug bunkers and trenches on high ground overlooking the Sangro, and these were well screened by minefields. In addition, SP guns and light AFVs from 26. Panzer-Division, although not present in great numbers, added significantly to the firepower and mobility of the division. However, it is clear that, once pushed hard, units of the division often surrendered in large numbers or fell back in a disorganised fashion. The reasons for this are not entirely clear given the German Army's generally high levels of motivation and discipline. The presence of large numbers of Volksdeutsche conscripts is one possible influence. 4th Armoured Brigade's own accounts highlight this as a potential weakness, and a report examining German morale prepared by SHAEF in early August 1944 argued that Volksdeutsche troops were more likely to desert, saying, 'These men, with very few exceptions, have never been eager to help Germany fight the war.'8However, as the next formation discussed will show, this was not always the case. It is also true that, prior to arriving in Italy, the division had not been in combat. This may have had effects of the types discussed in the main part of the thesis. The Germans were certainly careful to build new units around strong, veteran cadres, and this was an effective technique, but there would still be a need to build up trust and confidence in officers and NCOs. The formation

⁴ Intelligence Summary No. 10 (November 1943) in WO 169/8861, TNA, Kew and Phillips, *The Official History of New Zealand in the Second World War* Volume 1. (1957) p.67. Based on the 2nd New Zealand Division's own intelligence reports.

⁵ Noted in '4th Armoured Brigade Intelligence Summary No. 10', WO 169/8861, TNA, Kew.

⁶ LXXVI Panzer-Korps war diary, T314, Roll 1574, NARA and OKW Situation Maps, Lage Südwest, Nov-Dec. 1943, private purchase of PDFs from originals and 'Capture of German Positions on the Sangro' (5 Corps) pp. 3-4, WO 204 /8159, TNA, Kew.

⁷ Graham, Sharpshooters at War, p. 154.

⁸ WO 219/161, TNA, Kew.

would not have had large reserves of battle wisdom and the initial shock of combat may have rapidly and critically degraded the morale of some inexperienced soldiers.

Looking at the factors that degrade morale from part three of this thesis, one can see that a number of these might well have pressed down particularly hard on the division's soldiers. The weather was cold and wet throughout the Sangro fighting. Logistical problems were noted by the Germans.9 Most importantly, the German soldiers on the Sangro defences were attacked energetically, and for the most part skilfully, by superior numbers of troops who had an advantage in terms of both armour and artillery. These factors combined with the elements that undermined cohesion within the formation to ensure that 65. Infanterie-Division was effectively broken by the fighting in November and early December and had to be pulled out of the line and substantially rebuilt.

⁹ See 4th Armoured Brigade intelligence summaries for September and October 1943 in WO 169/8861, TNA, Kew. Reference made to prisoner debriefs and captured documents all describing logistical problems.

Table 6

65. Infanterie-Division (1942)
Infanterie-Regiment 145 (three battalions)
Infanterie-Regiment 146 (three battalions)
Panzerjäger- und Aufklärungs-Abteilung 165 (Anti-tank and Recce)
Artillerie-Regiment 165
Pionier-Battalion 165
Divisions-Nachrichten-Abteilung 165 (Signals)
Divisions-Nachschubführer 165 (Logistics)

9. SS Panzer-Division

9. SS Panzer-Division "Hohenstaufen" was perhaps the most formidable enemy formation that the brigade confronted in the period examined. SS Panzer units formed a large part of the German forces attempting to destroy or confine the British lodgement in Normandy. Whilst initially a small organisation, the Waffen-SS had expanded both rapidly and enormously during the war. By the summer of 1944, it contained almost 600,000¹¹ troops including several tens of thousands of foreign volunteers. Initially, the Waffen-SS was composed entirely of volunteers and prided itself on that fact; however, from 1943 onwards, it began to receive substantial numbers of conscripts. To begin with, these remained subject to considerable levels of selection in terms of physical fitness and

¹⁰ Neillands, *The Battle of Normandy*, 1944, pp. 162-63.

¹¹ Terry Goldsworthy, A Sociological and Criminological Approach to Understanding Evil: A Case Study of Waffen SS Actions on the Eastern Front During World War Two p.139.

'racial background', but this declined as the war progressed and the Waffen-SS struggled to fill its hugely inflated establishment. Whilst the units raised prior to the end of 1943 generally retained a fearsome reputation, many of the later ones appear to have been both poorly trained and poorly equipped.¹²

The National Socialist regime undoubtedly regarded the Waffen-SS as an ideologically reliable and motivated element¹³ within the armed forces, and it was given 'first choice' of equipment from 1941 onwards. As Max Hastings has written, they 'had become the fire brigade of Hitler's empire, rushed to every crisis'.¹⁴ Waffen-SS formations rapidly acquired a reputation for robust morale and a fierce offensive spirit; they also, equally rapidly, acquired a reputation for extreme brutality and a propensity to commit war crimes directed both at combatants and at civilians.¹⁵ The relationship between these two factors lies at the centre of much of the debate about the status and role of the Waffen-SS which emerged in the post-war period.

After the German surrender, the Waffen-SS was defined as a criminal organisation by the International Military Tribunal, though membership of it alone was not declared criminal *per se.*¹⁶ Many veterans of the organisation argued that most Waffen-SS soldiers had not been involved in atrocities. This materialised around Paul Hausser's 1966 book entitled *Soldaten Wie Andere Auch* (Soldiers just like the rest), and this expression continues to be widely repeated. However, there is a large body of comprehensively researched literature that argues persuasively that the

¹² Knopp, *The SS* (Stroud: Sutton Publishing, 2002) pp. 257, 261-62, 266, 272. Goldsworthy, pp. 188-91.

¹³ Goldsworthy, ibid. pp. 19, 138.

¹⁴ Hastings, *Das Reich*, p.25.

¹⁵ Knopp, pp. 254-56.

¹⁶ Goldsworthy, p. 321.

¹⁷ Paul Hausser (1880-1972) was a key figure in the development of the Waffen SS and a significant wartime commander of its formations.

¹⁸ Hausser, Soldaten Wie Andere Auch (Osnabrück: Munin Verlag, 1966).

¹⁹ See Goldsworthy, *Understanding Evil* pp.17-18 for an overview of 'apologist' literature.

soldiers of the Waffen-SS were not 'like the rest'.²⁰ A substantial number of primary source documents relating to *9. SS Panzer-Division* were seen for this study; these were from captured German files held at the National Archives and Records Administration (NARA) in the USA. These are partial but give some coverage of the two periods of interest of this study. There is also a substantial body of published veteran accounts in existence, many of them collected in the sixties and seventies by Wilhelm Tieke,²¹ himself a Waffen-SS veteran. These form part of a particular Waffen-SS veteran historiography which is often tacitly ideological and needs to be approached with great caution, though it is undeniably a useful resource.

The *9. SS-Panzer-Division* was authorised in December 1942 and began organising and training early in 1943.²²It was created at the same time as the *10. SS-Panzer-Division "Frundsberg"*, and the two divisions comprised *II SS-Panzer-Korps*. The majority of its ORs were drawn from two sources.²³ These were, first, 17-year-old RAD (*Reichsarbeitsdienst*)²⁴ members who had volunteered for service in the Waffen-SS and some older RAD members who were now liable for conscription and, second, *Volksdeutsche* conscripts drawn from ethnic German communities in occupied or Axis-allied Europe (mostly Hungary and Romania in this case). Tieke's account admits that some of these young men were effectively tricked into joining the Waffen-SS via deliberately confusing processes and then denied the opportunity to change their choice.²⁵ The cadre of officers and SNCOs that the formation was built up around were mainly drawn from the 1. SS "*Leibstandarte*" and 2. SS "*Das Reich*" Divisions. These men were veterans of the all-volunteer early Waffen-SS. The division thus largely comprised conscripts and what might be termed 'pseudo-

²⁰ For refutations of the *Soldaten Wie Andere Auch* position see Goldsworthy ibid, Knopp, '*The SS*' and Lieb, '*Konventioneller Krieg*'

²¹ Wilhelm Tieke, *In the Firestorm of the Last Years of the War.*

²² Reynolds. Sons of the Reich, pp.1-2.

²³ See Tieke, *Firestorm*, pp. 1-9.

Reich Labour Service, a paramilitary state organisation, formed in 1934 and initially used to perform manual work for major infrastructure projects. By 1943 it was essentially an auxiliary arm of the Wehrmacht.
 Tieke, p. 3.

volunteers', but a sustained, conscious effort was made during training to instil them with the ethos of a selective, volunteer formation.²⁶

The Division's battalions were trained in France and were ready to be deployed by March 1944. The tank regiment was mainly equipped with Panthers. In March and April, the division was sent to the Eastern Front and fought mainly in the Tarnopol area. They were rushed back to France in early June, within days of the Allied landings. 4th Armoured Brigade encountered the division twice, the first time was in Normandy in the fighting around Hill 112 from late June to mid-July. Elements of the division reappeared in Holland in September 1944 within a number of mixed *Kampfgruppen* encountered by the brigade. In Normandy, JUPITER inflicted severe casualties on both of the SS Panzer Divisions within *II SS-Panzer-Korps*. Indeed, *Hohenstaufen's* Panzergrenadier battalions were so depleted that its two regiments had to be reorganised as one.²⁷Despite being further mauled in Normandy, the division was successfully extracted from France and began rebuilding in the Netherlands. This process was interrupted by MARKET GARDEN. Both divisions of II SS-Panzer-Korps are acknowledged to have played a significant role in derailing the operation.²⁸

The division's war diaries, though incomplete, give a good sense of the training undertaken both during the formations construction and thereafter between periods of combat. They also offer some indications of ethos. The training programme dated July 1943 makes an interesting point: 'Supply troops are not "rear area services" today. Infantry training must be such that they can fight partisans, paratroopers etc. at any time.' Also, such units might have to 'seal off enemy forces that have broken through'.²⁹The key secondary role of almost all of the division's troops was to act as infantry. Throughout there is an emphasis on tough and realistic training. Exhortations to be committed and

²⁶ Tieke, pp. 1-9.

²⁷ Tieke, *Firestorm*, p.157.

²⁸ Williams, *D-Day to Berlin*, pp. 231-48. Buckley, *Monty's Men*, pp. 216-30.

²⁹ 'Ausbildungsrichtlinien 31.10.43.' in T354, Roll 147, NARA.

both mentally and physically strong are frequent. For instance, on a notice from 1943 it is stated that 'the brave and undaunted always come through' and 'purposeful action gives you superiority over the enemy'. Nonetheless, some post-war scholarship has argued that the Waffen-SS suffered from a distinct poverty of senior NCOs and middle-to-senior-ranking officers and that this undermined its units' fighting effectiveness. Aggression and politicised loyalty could not compensate for failings in tactical skill and military discipline. Despite this area of weakness, German historian Peter Lieb's work has shown that Waffen-SS units in Normandy provided a far smaller proportion of total prisoners taken by the Allies. This was certainly a factor in *Hohenstaufen*'s fighting effectiveness, but nonetheless, the division was unable to win significant victories in any of the actions involving 4th Armoured Brigade.

³⁰ 'Merkpunkte für den Soldaten im Gefecht,' undated but appears to be summer 1943, in T354, Roll 147, NARA.

³¹ Knopp, pp. 266-67.

³² Lieb, pp. 435-448.

Table 7: Composition of 9. SS-Panzer-Division (Normandy)

2. Marine-Infanterie-Division

The Marine Infantry Divisions, of which three were formed, were another curiosity within the German order of battle. Although largely wearing army uniforms, trained by the army, and equipped and organised as an infantry formation, the divisions were part of the navy. The origin of these formations lies entirely in the German government's desperate attempts to wring out remaining manpower for combat units towards the end of the war. Yet, unlike many other late-war 'emergency' formations, the Marine Divisions were, as already shown, very capable and resilient. 4th Armoured Brigade reports labelled the formation as one that 'fought hard and skilfully'.

The reason for this probably lies in the origins of the manpower; the Kriegsmarine enjoyed considerable leeway to recruit selectively during the pre-war and early war years and this was enhanced by the navy's relatively high status socially.³ There are no accurate records of NSDAP membership within the Kriegsmarine, and all service personnel were required to suspend their party membership anyway.⁴ Philip Blood argues that the Kriegsmarine was highly nationalistic even before the Hitler period. The Nazis were able to utilise this. In addition, in the Kaiser's period, naval infantry had been prominent in German colonies and were 'aggressive and uncompromising fighters'.⁵ There was thus perhaps a higher degree of 'buy-in' amongst many in the Kriegsmarine. This might have made little difference by 1945 had it not been for the fact that outside of the U-boat arm (which had suffered catastrophic casualties)⁶ the German Navy had suffered far lower casualty levels than either the Heer or the Luftwaffe. Consequently, it represented a reserve of largely fit and well-motivated manpower.

¹ All three are covered within Bernd Bölscher, *Hitlers Marine im Landkriegseinsatz 1939-45*.

² Carver, p. 215.

³ See Jak Showell, *Hitler's Navy*, Chapter 1.

⁴ Per *Wehrgesetz* 21/5/1935. This was altered late in 1944 to allow active party membership. Conversation with Jake Holliday, University of Buckingham, March 2023.

⁵ Dr Philip Blood. Exchange of messages via Twitter, 15/03/2023.

⁶ Showell, pp. 114-124 and also, https://www.liverpoolmuseums.org.uk/battle-of-atlantic/cost-of-battle, [retrieved February 10th , 2023].

The formation was raised by the order of the Führer on the 31st of January 1945 and began training in Schleswig-Holstein. It was to be created as a Type 1945 division, which only a handful of other formations were. On March 10th, on Hitler's orders, it was renamed *2. Marine-Infanterie-Division*. Shortly after this, it was moved to the area between Verden and Schwarmstedt to take part in the fighting on the rivers Weser and Aller. The surviving war diary, though limited, gives a good impression of the hybrid nature of the formation. The initial pages describe the equipping and training of *2. Marine-Infanterie-Division*, outlining responsibilities across the Wehrmacht. Weapons and equipment were to be supplied by the Heer, which also undertook to supply motor vehicles, horses, wagons and bicycles. Training staff were to be provided by both the Heer and the Kriegsmarine. Some specialist units within the division were brought in directly from either the army or the navy. The divisional anti-aircraft detachment was an existing naval flak unit and the *Panzerjäger* unit was provided by the army.

The division was more lightly equipped than either of the two already discussed here and considerably smaller in total manpower, at about 10,000 strong. The 2. Marine-Infanterie-Division is unusual in that it is one of a tiny number of Type 1945 divisions to actually see service as opposed to the better known Volksgrenadier divisions. Importantly, it never quite reached its full authorised strength. The Panzerjäger-Abteilung was smaller than intended and the flak unit had some guns removed, making it short on firepower. Despite this, it still presented a powerful force which had managed to create a strong sense of identity with robust morale and cohesion. Along with the ubiquitous MG-42 machine guns, the division also had a large allocation of the new StG-44 assault rifles. To

⁷ T315, Roll 2298, NARA.

⁸ Report, Aufstellung 2. Marine-Infanterie-Division dated February 22nd, 1945, T315, Roll 2298, NARA.

⁹ John Russell, *No Triumphal Procession* (London: Arms and Armour Press, 1994).

¹⁰ Grundgleiderung der Inf. Div. 45, dated February 1945, T315, Roll 2298, NARA and Russell, p. 39.

The division's units fought a well-conducted defensive action in the villages and small towns around Verden. Particularly heavy fighting was recorded at Nordkampen and Kreepen. Although the fighting in Kreepen was brief, it appears to have been fierce and some at least almost hand to hand. Three officers (2 KRRC) claimed to have shot and killed Germans with their revolvers during the fighting. 11 This was a relatively unusual event. The commander in Verden, Kapitän zur See Neitzel, realised that despite orders to hold the town at all costs this was untenable and would result in heavy civilian casualties. During the evening of the April 16th, he began pulling most of his troops out of the town and retreating to the north-east, leaving behind a substantial delaying force in the southern outskirts of Verden. The 3/4 CLY and 1 OX BUCKS LI/1 HLI battle group initially met ferocious opposition in the early hours of the 17th with heavy small arms fire and Panzerfaust launches. However, this began to crumble in the face of bombardment from the CLY tanks and 53rd Division's artillery. By 05.30, the southern edge had been secured and the force moved into the town centre, which was undefended. The two battle groups moving in from the north were able to ambush a number of the groups retreating from Verden during the 16th and 17th. Almost all of 2. Marine-Infanterie-Division's artillery was destroyed or captured in this way. Verden was declared secured in the early hours of April 18th. In the course of this fighting, the division was completely destroyed with most of its personnel being captured or killed and all of its heavy equipment lost.

¹¹ Wake and Deedes, p. 333.

Table 8

2. Marine-Infanterie-Division 1945
Marine-Grenadier-Regiment 5
Marine-Grenadier-Regiment 6
Marine-Grenadier-Regiment 7
Marine-Füsilier-Bataillon 2 (Light infantry on bicycles)
Marine-Artillerie-Regiment 2
Marine-Panzerjäger-Abteilung 2 (Anti-tank)
Marine-Pionier-Bataillon 2
Marine-Nachrichten-Abteilung 2 (Signals)
Marine-Feldersatz-Bataillon 2
Marine-Versorgungs-Regiment 200 (Logistics)

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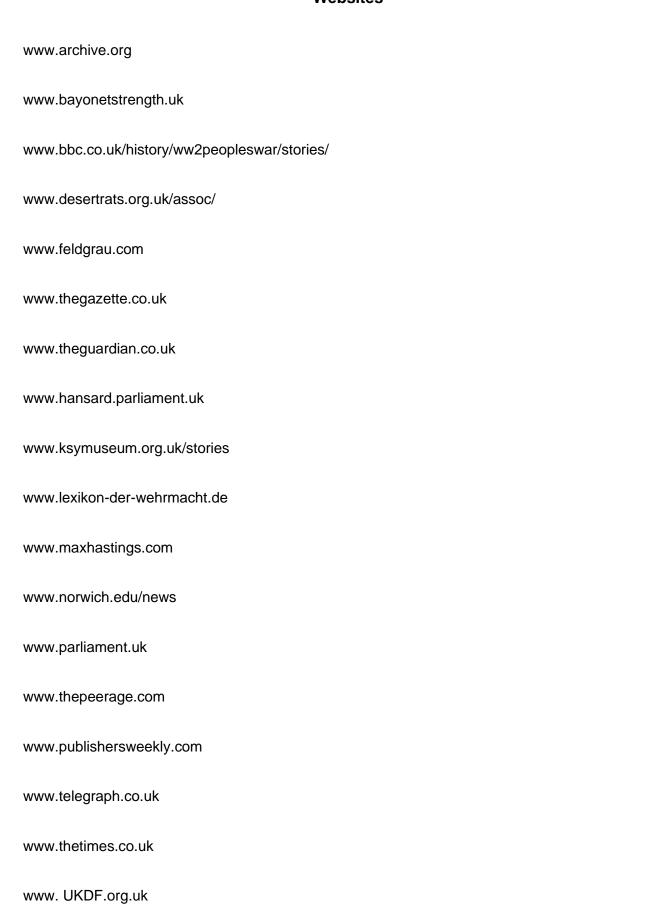
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