Introduction

Reflecting back on his experience of overseeing the nation's war effort during the First World War, David Lloyd George lamented the 'rigidity and restrictiveness about the methods employed', which he felt had 'allowed no play for initiative, imagination and inventiveness'. The war, he observed, revealed that

> independent thinking is not encouraged in a professional Army. It is a form of mutiny. Obedience is the supreme virtue. Theirs not to reason why. Orders are to be carried out and not canvassed. Criticism is insubordination . . . Such an instinctive obedience to the word of command . . . makes an 'officer and a gentleman' but it is not conducive to the building up of an alert, adaptable and resourceful leader of men.[1]

A strident critic of the British military and its senior commanders, Britain's former wartime prime minister pointed to what he saw as serious cultural deficiencies within the British army. There were fundamental problems within the institution. While the army had many qualities, such as meritocracy and objectivity, for Lloyd George, it was a bureaucracy in the worst sense of the word: rigid, hierarchical, incapable of adaptation, and averse to change. Lloyd George was not the only critic of the army's cultural and intellectual foundations. Basil Liddell Hart, though less vociferous, was no less scathing with his assessment that 'the only thing harder than getting a new idea into a military mind is to get an old idea out'.[2] For Lloyd George and Liddell Hart, the army was institutionally and culturally deficient when it came to innovation and adaptation.

These negative perceptions have become a mainstay in popular perceptions of the British army in the First World War. While the centenary commemorations have enhanced awareness of the war more broadly, notions of military competency and effectiveness are not as palatable to

[1] D. Lloyd George, *War Memoirs*, II (2 vols, London: Odhams Press, 1938 [1936]), pp. 2040–2041.
[2] B. H. Liddell Hart, *Thoughts on War* (London: Faber and Faber, 1944), v.

the general public as those of pity and futility.[3] The narrative of tragedy is hard to dislodge, particularly in Britain, where the conflict has become a byword for military misadventure. As one esteemed historian reminds us, the idea of a British army 'learning curve' – a term lifted from the business world – 'sticks in the gullet of many people in Britain because the curve was so liberally greased with soldiers' blood'.[4] Put simply, innovation and adaptability are not concepts that we necessarily associate with the seemingly unwieldy behemoth that was the British army of the First World War. Instead, they are notions that we are more likely to ascribe to the small, agile military forces of the post–National Service period.

Words like innovation, adaptability, and responsiveness litter modern defence reviews and policies alike. They are the watchwords of increasingly lean forces. In an age of austerity, innovation and entrepreneurialism have become all the more desirable. Yet, whilst smaller budgets may necessitate improvements in tactics, techniques, and procedures, these efficiencies are often more aspirational than tangible or deliverable. Western militaries in particular have grappled with the goal of becoming a Peter Senge-style 'learning organisation' – an ideal that is more myth than reality.[5] The drive for greater innovative capabilities can be seen in Australia's 2008 'Adaptive Army' initiative with its restructuring of higher command and control arrangements to ensure that learning and adaptation is more integral to the structure and culture of the Army.[6] The US's 'third offset strategy' and its 2014 quadrennial review reaffirmed that 'innovation . . . is a central line of effort . . . [and] is paramount given the increasingly complex warfighting environment we

[3] See M. Hough, S. Ballinger, and S. Katwala, *A Centenary Shared: Tracking Public Attitudes to the First World War Centenary, 2013–16* (London: British Future, 2016).

[4] D. Reynolds, 'Britain, the Two World Wars, and the Problem of Narrative', *Historical Journal* 60 (1) (2017), p. 222.

[5] P. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization* (New York: Doubleday, 1990). For the appropriation of the 'learning organization' in a military context, see J. Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam* (Chicago: Chicago University Press, 2005 [2002]); A. J. DiBella, 'Can the Army become a Learning Organization? A Question Reexamined', *Joint Force Quarterly* 56 (1) (2010), pp. 117–122; G. A. Daddis, 'Eating Soup with a Spoon': The US Army as a 'Learning Organization' in the Vietnam War', *Journal of Military History* 77 (2013), pp. 229–254; R. Di Schiena, G. Letens, E. Van Aken, and J. Farris, 'Relationship between Leadership and Characteristics of Learning Organizations in Deployed Military Units: An Exploratory Study', *Administrative Sciences* 3 (2013), pp. 143–165. For some of the weaknesses of the 'learning organization' concept more broadly, see S. Kerka, *The Learning Organization: Myths and Realities* (Washington, DC: Office of Educational Research and Improvement, 1995); C. Hughes and M. Tight, 'The Myth of the Learning Society', *British Journal of Educational Studies* 43 (3) (1995), pp. 295–296, 299–300.

[6] J. Blaxland, *The Australian Army from Whitlam to Howard* (Melbourne, VIC: Cambridge University Press, 2014), pp. 352–353.

expect to encounter'.[7] In Britain, the Ministry of Defence's 'Defence Innovation Initiative', launched in 2016, drives home the point that 'innovation is key to maintaining our military advantage, and that to realise this a 'culture that is "innovative by instinct"' is required, which emphasises the willingness to accept risk.[8] The British army's ongoing 'Army 2020' review is predicated upon the need to be 'an integrated, adaptable and sustainable Force for the future'. One of the review's key themes is 'versatile by design', which enables the army to hark back to its 'proud record of adapting quickly to meet any crisis'.[9]

While expressions like 'innovative by instinct', 'adaptable forces', and 'learning organisations' might carry an air of modernity, this book shows that learning, innovation, and change are not just twenty-first-century concerns. The need to learn from mistakes, to exploit new opportunities, and adapt to complex situations in order to defeat an adversary on the 'other side of the hill' are enduring and timeless. This book takes the British army of the First World War as its case study. Moving beyond the operational focus of existing studies, it examines the army's institutional process for learning and adaptation more broadly. It poses a number of questions: how effective was the army's learning process? Did a 'culture of innovation' exist within the army? If such a culture existed, to what extent was this maintained during the First World War? How do we reconcile the relationship between learning and performance?

This book does not seek to whitewash the British army's performance during the First World War. Costly mistakes were made. Blimpish pockets existed. Certain individuals were overpromoted, ill-equipped to deal with the war they faced. Irrational choices were made without sufficient forethought. These aspects ought not to be ignored or marginalised. Instead, they need to be integrated into any discussion of learning and change, adding much-needed realism to our understanding of an inherently messy process. This process – the continual series of actions and steps taken – is often reduced to cause and effect, input and output. The expansive nature of learning is overlooked, as well as the ways and means that facilitate it. This book aims to reinstate some of the complexity and messiness associated with learning. It grapples with the army's failings and shortcomings, explores its successes, and acknowledges the inherent

[7] Department of Defense, *Quadrennial Defense Review 2014* (Washington, DC: Department of Defense, 2014), p. 22.
[8] Ministry of Defence, *Advantage through Innovation: The Defence Innovation Initiative* (London: Ministry of Defence, 2016), pp. 2, 4.
[9] Ministry of Defence, *Transforming the British Army: An Update – July 2013* (London: Ministry of Defence, 2013), pp. 29, 28. Following the 2015 National Security Strategy and Strategic Defence and Spending Review's amendments to 'Army 2020', it is now known as 'Army 2020 Refine'.

difficulties of learning in a desperate and lethally competitive environment. In short, it reveals that failure to understand how the army learned obfuscates our understanding of how the army changed as an institution. A better understanding of this relationship has profound implications for our historical memory of the First World War, forcing us to acknowledge the importance of learning and the myriad difficulties that the British military faced, not least of which was the efficacy of its adversary.

Although the book necessarily engages with operational and tactical learning, it also has a broader remit. It considers the army's institutional openness to learning and change, of which operations were only one facet. It is as much about what (and how) the army learned from different disciplines, nations, and walks of life, as it is about those tactical lessons gleaned from the battlefield. By taking a more holistic approach, the book recasts learning and innovation as a type of bricolage: a reconfiguration of different knowledges resulting from encounters between different cultures.[10] Concerned with the movement, reinterpretation, and transformation of expertise, knowledge, and lessons, the book is as much an institutional study of the British army in the First World War as it is a study of *transfert culturel* within a military context.[11]

How, and if, militaries learn has been of long-standing interest to historians and social scientists alike. The observation that militaries are averse to change is not one limited to former British prime ministers. It is a view that has proved an important element of scholarship in the field of military innovation studies. Early writings identified the hierarchical, rule-bound nature of the military as a barrier to change; that the absence of innovation was the natural state for the military as a bureaucracy. Commentators suggested that militaries needed to be goaded into change, usually by outside involvement.[12] One critic went so far as to suggest that the military required a good 'kick in the pants' if it was to innovate.[13] Recent scholarship – primarily focused on post-1945 militaries involved in a single campaign – has challenged this change-averse view.[14] James Russell's examination of the US Army in Iraq showed how

[10] P. Burke, *A Social History of Knowledge: From the Encyclopédie to Wikipedia* (Cambridge: Polity, 2012), p. 86.

[11] See M. Espagne, 'La notion de transfert culturel', *Revue Science / Lettres* 1 (2013) (Published Online 1 May 2012. DOI: 10.4000/rsl.219), pp. 1–9.

[12] See e.g. B. Posen, *The Sources of Military Doctrine: France, Britain and Germany between the World Wars* (Ithaca, NY: Cornell University Press, 1984); K. Zisk, *Engaging the Enemy: Organization Theory and Soviet Military Innovation, 1955–1991* (Princeton, NJ: Princeton University Press, 1993); D. Avant, *Political Institutions and Military Change: Lessons from Peripheral Wars* (Ithaca, NY: Cornell University Press, 1994).

[13] Posen, *Military Doctrine*, p. 226.

[14] J. A. Russell, *Innovation, Transformation and War: Counterinsurgency Operations in Anbar and Ninewa Provinces, 2005–2007* (Stanford, CA: Stanford University Press, 2011), p. 211.

'a collection of hierarchically structured organisations' became the 'kind of agile and adaptive structures thought only to exist in certain parts of the private sector', while Nina Kollars has recently argued that military organisations tend to become fluid when exposed to Clausewitzian friction.[15] Indeed, decisions made in wartime do not always reflect a 'cautious, bureaucratic approach'.[16]

Scholarship on innovation can be broadly grouped into three main areas of enquiry, which will be summarised here and further explored throughout the course of the book.[17] First, we have where and how innovation (or adaptation) takes place. This can be broken down into three vectored approaches: top-down, bottom-up, or horizontal. The top-down approach has generally focused on innovation in peacetime, thus ignoring the 'adapt or die' dilemma that accompanies the victory imperative of war.[18] It is also concerned with organisation-wide revolutions, disruptive technological change, and elite-driven politics. Such interpretations tend to argue that only civilians or senior military leaders can effect innovation, removing practitioners from this narrative. This contributed to the emergence of the second major strand of literature: the bottom-up approach, which sought to incorporate the role of practitioners in this process.[19] There was a drive to re-establish the relationship between human behaviour, particularly lower down the hierarchy, and organisational behaviour. Emerging from this bottom-up scholarship was the concept of military adaptation. Underpinned by organisational learning theory, studies on adaptation have tended to focus on modern, Western militaries during counter-insurgency operations with the aim of distilling lessons for future conflicts.[20] The final

[15] N. A. Kollars, 'War's Horizon: Soldier-Led Adaptation in Iraq and Vietnam', *Journal of Strategic Studies* 38 (4) (2015), p. 550.
[16] Russell, *Innovation*, pp. 208–209.
[17] For a recent overview of the 'state of play' in military innovation studies, see S. Griffin, 'Military Innovation Studies: Multidisciplinary or Lacking Discipline?', *Journal of Strategic Studies* 40 (1–2) (2017), pp. 196–224. See also A. Grissom, 'The Future of Military Innovation Studies', *Journal of Strategic Studies* 29 (5) (2006), pp. 905–934.
[18] For examples of this top-down approach, see Posen, *The Sources of Military Doctrine*; S. P. Rosen, *Winning the Next War: Innovation and the Modern Military* (London: Cornell University Press, 1991); Zisk, *Engaging the Enemy*; Avant, *Political Institutions*; E. Kier, *Imagining War: French and British Military Doctrine between the Wars* (Princeton, NJ: Princeton University Press, 1997); T. G. Farrell and T. Terriff (eds), *The Sources of Military Change* (Boulder, CO: Lynne Rienner, 2002).
[19] E. A. Cohen, 'Change and Transformation in Military Affairs', *Journal of Strategic Studies* 27 (3) (2004), pp. 395–407; Grissom, 'Future'.
[20] See e.g. T. G. Farrell, 'Improving in War: Military Adaptation and the British in Helmand Province, Afghanistan, 2006–2009', *Journal of Strategic Studies* 33 (4) (2010), pp. 567–594; S. Catignani, '"Getting COIN" at the Tactical Level in Afghanistan: Reassessing Counter-Insurgency Adaptation in the British Army', *Journal of Strategic Studies* 35 (4) (2012), pp. 513–539; Kollars, 'War's Horizon'; R. Marcus, 'Military Innovation and Tactical Adaptation in the Israel-Hizballah Conflict: The

approach – horizontal innovation – is influenced by adaptation scholarship and pioneered by Robert Foley with his work on the German Army in the First World War.[21] This approach adds another dimension to our understanding of learning that moves beyond the vertical polarity of top-down and bottom-up. Recent scholarship has added nuance to this process, highlighting the 'dynamic interplay' between different learning approaches, as well as the importance of the military's 'tolerance of creativity'.[22]

Secondly, scholarship has grappled with the dynamics of organisational culture and the role that it plays in facilitating or hindering innovation. While some scholars saw the military as rigid and inflexible, particularly in peacetime, others have suggested that, in time of war, the military becomes far more decentralised and fluid.[23] It is not rigidity that undermines efforts to change, but rather the military's struggle with 'the knowledge generated by its practitioners'.[24] Culture can determine how an organisation approaches learning, shaping the ways and means used. Foley, for example, has considered the importance of distinct learning cultures to British and German adaptation during the First World War.[25] This book suggests that, while pioneering in approach, Foley's work in important ways needs revision, not least of which his contention that the British army was more likely to use 'non formal' methods to learn.

The final strand of scholarship tackles the challenges of capturing and converting low level, informal learning into organisational learning. For our purposes, organisational learning – a notoriously difficult concept to pin down – may usefully be defined as 'the process of improving actions through better knowledge and understanding'.[26] Much of the

Institutionalization of Lesson-Learning in the IDF', *Journal of Strategic Studies* 38 (4) (2015), pp. 500–528; K. A. Harkness and M. Hunzeker, 'Military Maladaptation: Counterinsurgency and the Politics of Failure', *Journal of Strategic Studies* 38 (6) (2015), pp. 777–800.

[21] R. T. Foley, 'A Case Study in Horizontal Military Innovation: The German Army, 1916–1918', *Journal of Strategic Studies* 35 (6) (2012), pp. 799–827.

[22] Marcus, 'Institutionalization of Lesson-Learning', p. 500; Kollars, 'War's Horizon', p. 21.

[23] For studies on organisational flexibility, see R. D. Doubler, *Closing with the Enemy: How GIs Fought the War in Europe, 1944–1945* (Lawrence: University Press of Kansas, 1994); J. Buckley, *British Armour in the Normandy Campaign 1944* (London: Routledge, 2004), pp. 9–11, 92–98; J. Buckley, 'Tackling the Tiger: The Development of British Armoured Doctrine for Normandy 1944', *Journal of Military History* 74 (2010), pp. 1161–1184; Russell, *Innovation*.

[24] Kollars, 'War's Horizon', p. 534.

[25] R. T. Foley, 'Dumb Donkeys or Cunning Foxes? Learning in the British and German Armies during the Great War', *International Affairs* 90 (2) (2014), pp. 279–298.

[26] C. M. Fiol and M. A. Lyles, 'Organizational Learning', *Academy of Management Review* 10 (4) (1985), p. 803.

scholarship in this subset concerns itself with the relationship between informal and formal learning.[27] When we talk about informal learning, we are generally referring to that which occurs through practice and experience. It is tacit in nature, often unintended and opportunistic.[28] Formal learning, on the other hand, is 'institutionally sponsored', occurring in an organised and structured context.[29] Yet, even in the most bureaucratic institutions, there is much that is unwritten, unsaid, and informal in nature.[30] Informal methods are often key sites for adaptation, but the failure to integrate these into the formal learning system can lead to 'adaptation traps', increasing the likelihood of solutions being 'lost, reinvented, or duplicated under the fog of war'.[31]

While existing research has enhanced our understanding of the interplay between informal and formal learning, this book challenges this largely binary approach, suggesting new ways of understanding organisational learning in a military context. Drawing upon the various theories of military innovation, the book argues, instead, for a more complex, integrated view of learning. The networked model of learning developed in this book points to the importance of the interconnectedness between top-down, bottom-up, incidental, and horizontal approaches. How learning is diffused is contingent on the size and extent of the networks involved. This model puts the individual front and centre, demonstrating the importance of human choice, behaviour, and action to the transfer of knowledge, as well as the importance of organisational culture or ethos in influencing the shape and evolution of British army learning.

Unlike military innovation studies, learning in the First World War has not been subject to the same level of sustained analysis. With the

[27] This is a burgeoning and exciting area of scholarship. See K. B. Bickel, *Mars Learning: The Marine Corps' Development of Small Wars Doctrine, 1915–1940* (Boulder, CO: Westview Press, 2001); R. T. Foley, H. McCartney, and S. Griffin, '"Transformation in Contact": Learning the Lessons of Modern War', *International Affairs* 87 (2) (2011), pp. 253–270; P. O'Toole and S. Talbot, 'Fighting for Knowledge: Developing Learning Systems in the Australian Army', *Armed Forces and Society* 37 (1) (2011), pp. 42–67; C. C. Serena, *A Revolution in Military Adaptation: The US Army in the Iraq War* (Washington, DC: Georgetown University Press, 2011); S. Catignani, 'Coping with Knowledge: Organizational Learning in the British Army?', *Journal of Strategic Studies* 37 (1) (2013), pp. 30–64.

[28] M. Eraut, 'Informal Learning in the Workplace', *Studies in Continuing Education* 26 (2) (2004), p. 250.

[29] D. McGuire and C. Gubbins, 'The Slow Death of Formal Learning: A Polemic', *Human Resource Development Review* 9 (3) (2010), p. 250.

[30] D. H. Kim, 'The Link between Organizational and Individual Learning', *Sloane Management Review* 35 (1) (1993), p. 45.

[31] Catignani, 'Coping with Knowledge', pp. 32, 38–39; Kollars, 'War's Horizon', p. 548.

exception of a single study on 'military effectiveness' in the First World War, studies on British military learning have been isolated and fragmentary despite the burgeoning literature that is broadly aligned with the concept of a 'learning curve' or 'learning process'.[32] This Anglocentric concept is used to describe the evolution of the British army from a small, colonial *gendarmerie* in 1914 to a mass citizen army capable of waging sophisticated operations in industrial warfare in 1918.[33] Historians associated with this concept have used the term to convey the belief that the army learned from its mistakes at the operational and tactical levels of war, attaining a high level of proficiency that manifested itself during the Hundred Days offensive of 1918.[34] Scholarship associated with the learning curve has tended to focus on British, Western Front operational and tactical considerations, including studies on command, new technologies, and the important role of Imperial forces.[35] More recent additions to this canon have grappled with the less glamorous aspects

[32] A. R. Millett and W. Murray (eds), *Military Effectiveness, Vol. 1, The First World War* (New York: Cambridge University Press, 2010 [1988]). This single study, funded by the Office of the Secretary of Defense, sought to understand the problems facing the US military in the 1980s. As a result, Millett and Murray chose case studies that very much reflected the strategic environment of the early 1980s. Paul Kennedy's chapter on Britain and the First World War offers a largely condemnatory account of the British army, arguing that its effectiveness was only 'moderately good' and that it 'might have done better'. See P. Kennedy, 'Britain and the First World War', in Millett and Murray (eds), *Military Effectiveness*, pp. 31–79.

[33] A handful of scholars have considered learning in other belligerent armies. See M. Goya, *La Chair et L'Acier. L'Armée Française et L'Invention de la Guerre Moderne 1914–1918* (Paris: Tallandier, 2004); C. Stachelbeck, *Militärische Effektivität im Ersten Weltkrieg: die 11. Bayerische Infanteriedivision 1915 bis 1918* (Paderborn: Ferdinand Schöningh, 2010); Foley, 'Horizontal'; Foley, 'Dumb Donkeys'.

[34] Forefathers of the 'learning curve' include J. Terraine, *Douglas Haig: The Educated Soldier* (London: Hutchinson, 1963); S. Bidwell and D. Graham, *Fire-Power: The British Army Weapons and Theories of War 1904–1945* (reprint, Barnsley: Pen and Sword, 2004 [1982]). Early proponents of the concept include B. Rawling, *Surviving Trench Warfare: Technology and the Canadian Corps, 1914–1918* (Toronto, ON: University of Toronto Press, 1992); P. Griffith, *Battle Tactics of the Western Front: The British Army's Art of Attack 1916–18* (London: Yale University Press, 2000 [1994]).

[35] For command and generalship, see S. Robbins, *British Generalship on the Western Front 1914–1918: Defeat into Victory* (London: Frank Cass, 2005); G. D. Sheffield, *The Chief: Douglas Haig and the British Army* (London: Aurum, 2011); A. Simpson, *Directing Operations: British Corps Command on the Western Front 1914–1918* (Stroud: Spellmount, 2006); P. E. Hodgkinson, *British Infantry Battalion Commanders in the First World War* (Aldershot: Ashgate, 2015). For technology, see S. Marble, *British Artillery on the Western Front in the First World War* (Aldershot: Ashgate, 2013); A. Palazzo, *Seeking Victory on the Western Front: The British Army and Chemical Warfare in World War I* (London: University of Nebraska, 2000). For Dominion forces, see Rawling, *Surviving Trench Warfare*; G. Morton-Jack, *The Indian Army on the Western Front: India's Expeditionary Force to France and Belgium in the First World War* (Cambridge: Cambridge University Press, 2014).

of the army's war machine, such as intelligence, communications, and logistics.[36]

The 'learning curve' has certainly added colour and depth to our understanding of the myriad changes taking place at different levels of command, in different branches, and behind the lines. Yet while efforts have been made to understand the disjointed nature of learning in wartime, these efforts remain sporadic.[37] There are also significant gaps in the historiography, not least of which is the concept's highly Anglocentric, Western Front bias.[38] The experience and influence of Britain's enemies and allies have been marginalised in the historiography with only a handful of truly comparative works.[39] Similarly, while recent scholarship has reassessed theatres beyond the Western Front, these theatres are still analysed singly, often resulting in a skewed picture of progress and development, thus failing to demonstrate the complex evolutionary processes at work.[40] One of the clearest shortcomings of the 'learning curve' has been the simplistic and, at times, reductionist linkage between the army's ability and willingness to learn and its battlefield performance. The binary association between learning and performance has obscured the reality of how the army learned by hitching it to the much more complex issue of success on the field of battle. Seductive as the notion that learning improves combat power may be, it must be acknowledged that myriad other concerns – terrain, weather, supply, morale, the enemy, relative balance of force (across all arms) – all complicate the association between the two to the extent that attempting to gauge how the army learned by focusing upon how it fought becomes impossible. Indeed, it is by moving past this linkage that this book presents the first thoroughgoing appreciation of how the army – across its multiple branches and theatres – learned during the First World War.

[36] See e.g. J. Beach, *Haig's Intelligence: GHQ and the German Army 1916–1918* (Cambridge: Cambridge University Press, 2013); B. N. Hall, *Communications and British Operations on the Western Front, 1914–1918* (Cambridge: Cambridge University Press, 2017); I. M. Brown, *British Logistics on the Western Front 1914–19* (Westport, CT: Praeger, 1998); C. Phillips, 'Managing Armageddon: The Science of Transportation and the British Expeditionary Force, 1900–1918', Unpublished PhD Thesis, University of Leeds, 2015.

[37] J. Boff, *Winning and Losing on the Western Front: The British Third Army and the Defeat of Germany in 1918* (Cambridge: Cambridge University Press, 2012).

[38] H. Strachan, 'The First World War as a Global War', *First World War Studies* 1 (1) (2010), pp. 3–14.

[39] See e.g. Robert Foley's scholarship.

[40] A handful of inter-theatre scholarship exists. See e.g. M. Harrison, *The Medical War: British Military Medicine in the First World War* (Oxford: Oxford University Press, 2010); P. Strong and S. Marble, *Artillery in the Great War* (Barnsley: Pen and Sword, 2011); Hall, *Communications*.

Beyond offering the first institutional study of the army's process for learning, the contribution of this book is three-fold. First, the book moves beyond the standard Western Front narrative of learning. Examining the army as an institution requires us to look beyond the British Expeditionary Force in France and Flanders, turning our gaze to the various British forces that fought in Egypt, Gallipoli, Italy, Palestine, and Salonika. Employing a multi-theatre approach also enables us to examine the important role that allies, enemies, and civilians played in the army's learning process. As such, we are rewarded with an enhanced understanding of the multiplicity of learning processes and modalities within a single institution.

Secondly, it changes the dialogue about learning, challenging the imprecision of the language and terminology used. Learning as a term and concept has been misapplied to the British army of the First World War. This book provides a necessary corrective. To date, discussion of organisational learning or the army as a 'learning organisation' is something of a misnomer when such discussions are merely confined to one front, one branch, or one formation.[41] An institutional focus enables us to better understand and interrogate these concepts, charting the relationship between individual, group, and organisational learning. Furthermore, while scholars have spilt ink over whether the army learned, not enough has been spent on the higher question of how it learned. To date, the processes of institutional learning that enabled the army to rise to the challenges of modern war have been poorly served by existing scholarship.[42] Engaging with this 'how' question has broader implications for our understanding of the nature of the army as an institution. It also helps us to understand why learning is not always successful. By re-establishing the importance of human agency to the learning process and unpacking the various ways and means of learning, we come closer to understanding why and how the army learned in the way that it did.

Finally, it moves away from the 'one campaign' approach that typifies most studies on innovation. It is impossible to determine how and to what extent doctrine and practice developed over time by focusing on a single campaign.[43] Grounding the army's learning experience in a pre-war context forces us to understanding learning as a continuous

[41] See e.g. E. Erickson, *Ottoman Army Effectiveness in World War 1: A Comparative Study* (London: Routledge, 2007); Hall, *Communications*; C. Forrest, 'The 52nd (Lowland) Division in the Great War', Unpublished PhD Thesis, University of Salford, 2010.

[42] W. Philpott, 'L'histoire militaire un siècle après la Grande Guerre', *Revue Française de Civilisation Britannique* 20 (1) (2015), pp. 1–2.

[43] D. French, *The British Way in Counter-Insurgency, 1945–1967* (Oxford: Oxford University Press, 2011), p. 7.