# Introduction: Military Adaptation in War

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The current war in Afghanistan has been ongoing now for almost a decade. How have Western states and militaries adapted to the challenges of this war? The North Atlantic Treaty Organization (NATO) took charge of the International Security Assistance Force (ISAF) for Afghanistan in 2003, and gradually expanded ISAF out from Kabul to the provinces from 2004 to 2006. Most of the European partners in ISAF conceptualized the mission their forces would conduct not as war at all, nor even counterinsurgency (COIN), but as a stabilization and reconstruction, only to find out that in Afghanistan this might actually require significant combat. How have their armed forces and the political leadership reacted? As ISAF expanded into the south and east of Afghanistan, it encountered a far more resistant and capable insurgency than had been anticipated. How did NATO and its member states respond? And as the campaign has evolved, key operational imperatives have clearly emerged, including military support to the civilian development effort, closer partnering with Afghan security forces, and greater military restraint. How have the different militaries in ISAF adapted in response to these imperatives?

History clearly shows that war forces states and their militaries to adapt. So it has been for the NATO partners in Afghanistan. All have adapted, in various ways and to varying extents, to campaign imperatives and pressures. This book explores how they have done so. We explore the *extent* and *processes* of military adaptation. Most of the cases we examine—Britain, Canada, Denmark, the Netherlands, and the United States—have been involved in the fighting in the south and east of Afghanistan. Because of this these states and militaries have faced the most intense operational and strategic pressures to adapt. We also examine the

case of Germany, as a major troop contributing state facing the greatest political and cultural constraints, and whose military is deployed on a stabilization mission in the north. Afghanistan has been NATO's first true test as a global security organization, and so we examine how it has adapted to the task. Two other military organizations are also crucial to the story of war and adaptation in Afghanistan—namely, the Afghan National Army (ANA) and the Taliban. NATO's exit strategy for this war depends on the ANA's taking over responsibility for securing Afghanistan. We look at how well the ANA has adapted to the challenges it faces. To complete our picture, we must look at "the other side of the hill," to see how NATO's opponents are adapting. Of course, this is not the first time that foreign powers have intervened in Afghanistan. Thus, we also look at military adaptation in previous campaigns in Afghanistan by the British and Soviet militaries to see what specific lessons may be learned from history.

In this book, military adaptation is defined broadly as *change to strategy*, force generation, and/or military plans and operations, undertaken in response to operational challenges and campaign pressures. Force generation includes force levels, equipment, training, and doctrine. Thus our definition covers adaptation at the strategic level (strategy and the mobilization of resources) and operational level (preparations for and conduct of operations).

In most cases, states and militaries may be expected to adapt in order to improve military performance and campaign prospects. But we should recognize that, in some cases, states may adapt in response to political pressures in ways designed to minimize the costs of, or national commitment to, an operation. Equally, militaries may adapt in ways intended to reduce operational risks. In other words, military adaptation is not always for the betterment of the campaign. Such behavior has been included in our definition of adaptation because it reflects the reality of those states that contribute forces to a military coalition primarily for political reasons tangentially related to the outcome of the military campaign (that is, for reasons of domestic or alliance politics).

This book conceives of military adaptation as occurring at two levels. At the strategic level, states adapt when they change strategy, force levels, and/or resources (including acquiring new equipment) for the military campaign. Obviously, states may increase national effort to achieve strategic success, pouring more troops and resources into the campaign. But equally, as suggested above, states may adapt to a failing campaign by reducing resources or adopting a new strategy. At the operational level, military organizations adapt when they change how they prepare for, plan, and/or conduct operations. Thus we include

adaptation in military tactics under the broader category of operational adaptation. Under this category adaptation may also cut both ways, and involve accepting more or less risk in operations, using more or less firepower, relaxing or tightening up rules of engagement, and so forth.

Here I introduce the common analytical framework for this book that is applied in the case studies. Our framework interrogates the mix of drivers and factors that has shaped military adaptation in each case. The most common and significant driver is operational challenges. Such challenges will be a powerful trigger of adaptation when they significantly increase risks to friendly forces or threaten to derail the mission. This should come as no surprise. Technological change is another significant driver, especially in opening up new opportunities to response to operational challenges. This too is to be expected. Perhaps more surprising is the extent to which four other factors—domestic politics, alliance politics, strategic culture, and civil-military relations—shape the process of military adaptation, and not always in ways that are helpful to the campaign. The case studies reveal how these factors often interact with operational challenges to shape how a state or military adapts.

At the same time, this book has sought to avoid weighing down our case studies with theory. All case study chapters follow the analytical framework. But our case study experts have been asked, first and foremost, to "tell the story" of military adaptation in their case. In some chapters the narrative focuses more on strategic than operational adaptation (such as the Canadian case) and vice versa (such as the US case).

In what follows, I begin by discussing the importance of adaptation in war. I then explore the distinction between military innovation and adaptation. Finally, I flesh out the common analytical framework.

#### WHY MILITARY ADAPTATION MATTERS

War invariably throws up challenges that require states and their militaries to adapt. Indeed, it is virtually impossible for states and militaries to anticipate all of the problems they will face in war, however much they try to do so.1 Even when states have good intelligence data on enemy intentions and capabilities, and on the social and geographical environment of operations, mistakes are commonly made when it comes to analyzing this data, digesting the analysis, and devising appropriate responses.<sup>2</sup> Cognitive limitations, organizational politics, military culture, and civil-military relations, may operate individually or collectively, to pervert timely and accurate strategic assessments.3 Hence Field

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Marshall Helmuth von Moltke's famous principle that "no plan survives contact with the enemy." States may underestimate the scale of the military challenge and accordingly the level of resources that must be committed for campaign success. Militaries may misunderstand the character of the conflict, or may be caught off guard by new technologies or tactics employed by opponents. Thus the imperative for adaptation is often a product of strategic, technological, or tactical surprise. But it need not be; simple unfamiliarity with the political or battlefield terrain, one's allies, or one's own new technology, may require learning and adaptation on the job.

For example, Britain faced growing pressure for strategic and operational adaptation in World War I (WW1). Britain was slow to appreciate the need for general mobilization of the population and economy. It was two years into the war before the cabinet came around to the view of Field Marshall Lord Kitchener, the Minister for War, that Britain "must be prepared to put armies of millions in the field and to maintain them for several years." It also took the British Army about two years to learn how to combine artillery barrages and infantry assaults effectively to breach the German defensive line.

A more recent example is the British military campaign in Iraq from 2003 to 2008. Following the successful US-led invasion of Iraq, Britain was given responsibility for securing the country's second largest city, Basra, and the surrounding provinces in southeast Iraq. The British military mistook a growing Shia insurgency for general lawlessness, and failed to appreciate the determination and growing capabilities of Shia militias. Rather than increase its military effort in response to this growing threat, Britain continued to follow a phased drawdown of its forces from Iraq. By 2007, Shia militias had seized control of Basra from the British, and it was left to the Iraq Army to regain control a year later.<sup>8</sup> This was a clear case of failure to adapt at the operational and strategic level. In fairness, the US military was also slow to recognize and respond to the threat from the Shia insurgency.<sup>9</sup> However, the United States did finally adapt at the strategic level with a surge of forces, and the US military adapted at the operational level by developing new counterinsurgency tactics and capabilities.<sup>10</sup>

The above cases, and others from history, underline the importance of military adaptation. Simply put, states and militaries that fail to adapt risk defeat in war, as the British discovered in Basra in 2007–8. In contrast, the United States did adapt its strategy and approach to operations, and turned around a failing campaign, in 2007–8. Other prominent examples are the fall of France in 1940 and Soviet failure in Afghanistan from 1979 to 1989. In each case, defeat was suf-

fered at the hands of a less powerful opponent (in material terms). The French lost to a less well equipped German army in 1940 because they were unable to adapt to German blitzkrieg tactics. Similarly, the Soviet Army that invaded Afghanistan was trained and equipped for conventional warfare. As Chapter 2 shows, the Soviets were slow in adapting to a far more dynamic guerrilla enemy, and remained wedded to firepower in their approach to counterinsurgency operations.11

The above cases also point to the difficulty that states and militaries can have in adapting when required. The point is that there is nothing natural or easy about military adaptation, be it at the strategic or operational level. A war strategy is often underpinned by considerable political and material investment, making it difficult for a state to contemplate changing it. Often, staying the course and "doubling-down" make better politics. 12 Furthermore, changing strategy can send the wrong signal to allies, enemies, and home publics (that of a failing campaign). In any case, it takes time for strategy to produce military and political effects, good or otherwise. This gives states added reason to delay, in order to give war strategy time to work.

Operational level adaptation should be easier because it usually involves smaller scale change. But the fact is that militaries find change difficult. Organizations are not designed to change, bound as they are by operating routines, bureaucratic interests, and cultural preferences. Organizations are understandably reluctant to abandon that which they have invested in and become good at: the concept of the "competency trap" nicely captures this problem.<sup>13</sup> Military organizations are especially disinclined to change, as closed and socially conservative communities that, especially in the West, exist apart from the rest of society.14 Military routines, interests, and culture mutually reinforce an organization's preferred ways of war. Moreover, when at war, a military has strong incentives to stick with those ways of operating that have been tried and tested, and for which the organization has trained and is equipped: the opportunity costs of introducing new ways of operating in the midst of war are high, especially if the new way does turn out to be not so effective. 15 Where militaries deploy units on a rotation cycle through operations for a limited duration (as is common in Western forces), this can adversely impact operational adaptation insofar as it hinders the institutionalization of lessons learned.

This explains why learning is so difficult for militaries. And yet, states and militaries do adapt in war, raising questions of when and how. Our analytical framework is designed to address these questions.

### MILITARY INNOVATION AND ADAPTATION

In the 1980s and 1990s a rich stream of scholarship by social scientists emerged on military change. Most of these studies focused on explaining military innovation. As Adam Grissom notes in his review of this literature, while there is no agreed upon definition in the field, a tacit definition may be discerned that encompasses three elements: military innovation involves major organizational change, "is significant in scope and impact," and is "equated with greater military effectiveness." Basically, almost all works in the field look at historical cases of military change that have had a major impact on the conduct of warfare, and seek to unpack how that innovation came about.

This scholarly focus on military innovation is understandable for three reasons. First, it involves the puzzle of major organizational change by conservative militaries. If militaries are disinclined to change, this will be doubly true for innovation. Change on this scale is especially disruptive for organizations, often requiring "forceful abandonment of the old." For the military undertaking innovation, this process of "creative destruction" is often painful.<sup>17</sup> Second, military innovation involves change that by definition is important, and has consequences for national policy and international politics. Military innovation often involves major expenditure of national resources, and can have consequences for regional balances of power.<sup>18</sup> Finally, military innovation studies got caught up with the growing scholarly and policy interest in the 1990s in understanding revolutions in military affairs.<sup>19</sup> In contrast, military adaptation held little interest for social scientists. It remained a topic for military historians in the context of studies of specific battles and campaigns.

Those few studies that have explicitly considered military adaptation have taken it to mean less significant change with little or no impact on strategy and organizational structures. In an earlier study, Theo Farrell and Terry Terriff offered the following definitions: "Innovation involves developing new military technologies, tactics, strategies, and structures. Adaptation involves adjusting existing military means and methods." Farrell and Terriff suggested that adaptation can accumulate to innovation: "Adaptation can, and often does, lead to innovation when multiple adjustments over time gradually lead to the evolution of new means and methods." Similarly, in his study of the US Army and US Marine Corps in Iraq in 2005–7, James Russell shows how "tactical adaptation can serve as a way station along the route toward more comprehensive innovation."

However, there is a problem with the assumption that military adaptation is about less significant change. As this book will show, adaptation may occur at the strategic level. Indeed, the imperative for strategic adaptability is officially recognized in UK defense policy.<sup>22</sup> The point is that any change at this level is significant. Even adaptation at the lowest operational level, such as adapting tactics, techniques, and procedures (TTPs), can add up to significant change in a military's capabilities or approach to operations. Tighter TTPs to produce more restraint and great discrimination in the use of lethal force were central to improving the US approach to COIN in Iraq.23 Conversely, failure to adapt at the tactical level may over time result in strategic failure.24

Overall, we do not consider it feasible or fruitful to draw too fine a distinction between adaptation and innovation. Indeed, it may be more helpful to think of the two as points on a sliding scale. In this book, military innovation implies a greater degree of novelty and disruptive organizational change than adaptation.25 This is consistent with previous studies by Farrell and Russell. For Russell, wartime innovation involves the development of "new organizational structures and new organizational capacities built in war." In his study on the British COIN campaign in Afghanistan, Farrell argues that when military adaptation "involves doctrinal or structural change, or the acquisition of a brand new technology, it crosses the threshold into innovation."26 Consistent with Farrell, Terriff, and Russell, we allow that adaptation may lead to innovation. But equally, it need not. Departing from the earlier scholarship, as outlined by Grissom, we do not consider "significance" of change to be a criterion for distinguishing adaptation and innovation. As discussed above, adaptation occurring at the strategic level can be very significant indeed.

Adaptation	Innovation	
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Adjusting strategy	Switching strategy	
Revising ROEs	Adjusting mandate	
Supplementing forces	Surging forces	
Retro-fitting equipment	Acquiring new equipment	
Adjusting training	Developing new doctrine	
Adjusting tactics	New approach to operations	

FIG. 1. The sliding scale of military adaptation and innovation

### THE COMMON ANALYTICAL FRAMEWORK

We use a common analytical framework to ensure a degree of commonality across our case study chapters—not so much to get in the way of "telling the story" but enough to facilitate comparisons across the case studies. All chapters adopt the definition of military adaptation given at the beginning of this chapter. All follow the book concept of adaptation at the strategic and operational levels. Each level may involve adaptation in a number of key areas that are identified in Table 1. As we noted before, the chapters do not give equal treatment to both levels in their analysis. For example, the German case is primarily about strategic adaptation, whereas the US case is more focused on operational adaptation. Overall the chapters provide a range of case studies of strategic and operational adaptation in Afghanistan.

In each case, we have asked authors, insofar as possible, to identify the key moments in their respective narratives when important adaptations occurred. Predictably, such "adaptive moments" are more evident in some case studies than in others. Our analytical framework recognizes two drivers and four shapers of military adaptation. These are also listed in Table 1 and elaborated below.

TABLE 1. Drivers and	d Shapers of	Military Ac	daptation
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Drivers	Shapers	Adaptations
	1. Domestic politics	Strategic:
Operational Challenges	2. Alliance politics	Strategy, force levels and resources
New Technologies	3. Strategic culture	Operational: Doctrine, training, plans
	4. Civil-military relations	and operations

### ADAPTATION DRIVERS

In war, pressures from operations are the most important driver of military adaptation. Military history suggests as much.<sup>27</sup> These pressures can take the form of new operational challenges or intensification of existing operational challenges. Such challenges may require militaries to adapt their training, doctrine, plans, or conduct of operations. If the challenges are severe enough, they may require states to adapt their campaign strategy, force levels, or resources.

## Operational Challenges

Our definition of military adaptation points to the importance of this driver. Operational challenges include intense combat over a protracted period, new enemy tactics, conducting operations at great strategic distance, operating in a demanding physical environment, having to depend on unreliable allies, and having to work with civilian partners to achieve campaign objectives.

Operational challenges may aggregate or reach such an intensity as to cause the military campaign to begin to fail. Military innovation theory suggests that such situations are highly likely to trigger change. In the seminal work in the field, Barry Posen noted the causal link between failure and innovation as a recurring theme in organization theory. "Events understood to be serious failures challenge the organization's basic existence."28 Applied to the arena of war, this suggests that military defeat can spur innovation. Posen's study further suggests that the mere prospect of defeat is enough to trigger military innovation. One might reasonably suppose that there is a proportionate causal relationship between the scale of failure and the speed and extent of innovative change. However, bureaucratic routines, norms, and interests can prevent organizations from correctly diagnosing failure and taking remedial action.<sup>29</sup> Hence, failure is not enough; there must be recognition by military commanders and policy-makers that the campaign is in trouble. At the strategic level, this requires mechanisms to enable civilian and military leaders to track and assess military progress, identify underperformance, and adjust strategy, forces, or operations as required.30

### New Technologies

A second driver of military adaptation is technological change. Unlike operational challenges, new technologies often provide imperatives and opportunities for military adaptation. Indeed it is best to think of these drivers as existing in symbiotic relationship. The arrival of new technologies on the battlefield, or adaptive use of old technologies by opponents, creates new operational challenges. These and other operational challenges generate requirements for new technologies and associated organizational capabilities. From the opponent's perspective, this in turn can create new challenges and requirements for new technological capabilities. The competition between Improvised Explosive Device (IED) tactics and technologies, and the counter-IED capabilities in Iraq and Afghanistan is a prime example of this.