# Strategic Theory and the History of War

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**READER'S GUIDE**

This chapter surveys the development of strategic theory from its emergence in the seventeenth century through the era of the world wars. Although the focus is on ideas, some account is also taken of the changing historical circumstances against which strategic thought has unfolded. The goal of theory in any field is to improve our understanding of reality, and our ability to act effectively. In the case of strategic theory, the interaction between thought and action is especially intimate, because war is such an unforgiving enterprise, and because, until recently, serious thinking about how war should be conducted has been confined mostly to those responsible for its organization. Before the advent of nuclear weapons, military theory was almost exclusively the concern of practitioners. Most have proceeded by way of historical inference, scrutinizing recent (and occasionally remote) experience in search of an underlying logic capable of explaining battlefield events. The result is a body of work displaying substantial intellectual continuity, despite much intervening technological and social change; but one whose basic outlook would eventually be called into question by the introduction of nuclear weapons on the one hand, and by the rising prominence of guerrilla insurgency, terrorism, and other forms of irregular warfare on the other.

# Introduction: The organization of violence

Strategic theory is the branch of **social theory** concerned with the use of force to achieve the goals of one community in conflict with others. It explores how to employ armed forces to advance political, social, economic, cultural, or ideological interests. War's **instrumental** nature—its logical and practical subordination to objectives outside itself—is in theoretical terms its most important characteristic. The first step in strategic analysis, as Napoleon said, is to ask 'What is the war about?' In the absence of an answer—or, alternatively, if the proposed answer is 'Nothing'— war becomes mindless bloodshed that can only be discussed in technical terms. It is because war is an organized social enterprise that **strategy**, which is the calculated application of collective violence for some ulterior purpose, becomes both possible and necessary.

The most famous assertion of war's status as a means occurs in Carl von Clausewitz's *On War*, where war is identified as 'a political instrument, a continuation of political activity by other means'; politics being defined elsewhere in the same work as the 'trustee' and 'representative of all the interests of the community'.[1] Clausewitz's originality as a theorist, however, derives not from his identification of war as a political instrument, but rather from his insistence that politics permeates all levels of military action. In itself the notion that war is a function of politics was already commonplace, as symbolized by the practice, popularized by Cardinal Richelieu (1585–1642), of casting the words *Ultima Ratio*—'the final argument'—into the barrels of cannon. This view of war as 'the final argument of kings' has predominated throughout the modern era.

Once it has been accepted as an adjunct of politics, however, war often is relegated to the margins of political theory. War does not loom large in the work of John Locke, or Montesquieu, or David Hume, or John Stuart Mill, or (with some qualification) Karl Marx. On the contrary, the dominant issue in Western political thought has always been how to organize and legitimize power within communities. That such communities would fight with each other was obvious but difficult to grasp analytically, because the contest was so chaotic. Most writers were content to follow Locke (and Thomas Hobbes before him) in envisioning the international arena as akin to the state of nature, lacking, in Locke's parlance, a 'common judge' whose authority was recognized by everyone. War served as a place-holder for the missing judge. At the same time, war's cruel and arbitrary character illustrated what life outside organized politics was like. When Clausewitz wrote in the 1820s that the natural element of war was chance, he was to some extent echoing a well-established understanding of where war fitted into the larger scheme of things.

The reasons why governments and individuals might venture into the chaos of war have always been subject to moral scrutiny. The literature on the justice of war, and justice in war, is more extensive and more impressive intellectually than writings on the conduct of war. Such concerns have impinged but little upon strategic theory, not because military theorists are necessarily indifferent to humanity, but because such external forces lie beyond the scope of their work.

Napoleon's question, however useful as a starting point, is deceptive in suggesting that, once war's purposes have been identified, its reality becomes easier to grasp. This is only marginally true. Compare with it, for instance, the question 'What is *Hamlet* about?' A

reasonably direct reply to this question—revenge, maybe, or perhaps betrayal—will only strike anyone familiar with Shakespeare's play as naive. Knowing that Hamlet feels betrayed and is bent upon revenge is inadequate to explain the complexity of his behaviour. Hamlet's actions and fate are determined by psychological and cultural forces that are remote from his conscious purposes, and beyond his cognitive reach.

In the end, the question 'What is *Hamlet* about?' is more likely to inspire an impatient demur than a firm answer. War is much the same, decidedly so in the case of protracted conflicts that affect society as a whole. As in *Hamlet*, most of what happens in war is driven by **unique or contingent circumstances**: cultural or institutional preferences, economic resources, geographic facts, or ethnic animosities, many of which are poorly understood even by the participants. The ability of theory to explain or incorporate such influences is limited. A belligerent's strategy typically arises directly from its military capabilities, refracted by habit: as often as not, you just do what you can, regardless of what course of action may be deemed optimal in principle.

Still, the impact of theory upon practice has not been negligible. The contemporary armies of China, France, Brazil, Egypt, and the United States resemble each other more than they do the armies of their ancestors because, despite cultural differences, they share a common understanding of the basic character and use of military force. That understanding is rooted in intellectual developments that occurred in Europe and America over the last three hundred years.

The force structures, weapons systems, and fighting methods of good armies in the seventeenth century—the period when the systematic study of war first gains importance—were markedly more diverse and idiosyncratic than they would be later on. A number of factors contributed to their eventual convergence, including the development of new technologies, and the progressive social and economic integration of Europe (and, eventually, of its colonial hinterlands). The exemplary achievements of France during the Revolutionary and Napoleonic wars (1792–1815) and of Prussia during the wars of German unification (1866–71) established models of military excellence for others to emulate. By the late 1800s, the soldiers of the leading powers were already learning to think about war along similar lines. The profession of arms had come to involve not just personal courage and the right social position, but distinctive intellectual preparation.

**KEY POINTS**

- Strategic theory is concerned with the use of force to advance or defend communal interests.
- War's most important characteristic, from the perspective of strategic theory, is its instrumental nature.
- Modern armies tend to resemble each other in part because they share a common intellectual outlook, based upon Western theoretical models.

# The Art of War in the Age of Reason

By the turn of the twentieth century, Western armies had arrived at a **common strategic vision** that would endure until after the Second World War. All sought the same basic end: to **concentrate strong forces against weaker ones**, by exploiting favourable terrain, or by striking the enemy at a place where they were inherently (or inadvertently) weak, or at a time when they were poorly prepared.

Such possibilities were thought to exist even between well-matched opponents because everything that fights on land, from the individual soldier to the army of which he is a part, is stronger on its front than on its flanks and rear; stronger when it has its feet under it than when it is moving to a new position; and dependent upon logistical and communications links that grow more vulnerable and less efficient in proportion to their length. Strategy was essentially a search for advantage among these facts. It was recognized that, given the firepower of modern armies, plus the fact that all of them operated according to similar methods, the likely result of combat between them was **stalemate**, or perhaps some modest territorial gain should one side manage to drive back the other. True victory, capable of deciding great political questions, however, required that the enemy's forces be not just repelled or reduced, but destroyed. Achieving this sort of success was a matter of high professional skill, to which civilians could make no contribution, either as political overseers, or as irregular combatants. This strategic consensus derived from a systematic study of war that began in the wake of the early-modern **scientific revolution**. War had, of course, been a subject of intense reflection long before then. Any number of works handed down from antiquity—the *Iliad* of Homer, the histories of Thucydides, Tacitus, and Josephus, Caesar's *Commentaries*—had treated war with much insight. Yet the aim was not to develop a generalized understanding of how war should be conducted, but to commemorate great events, and inspire courage and virtue.

In antiquity and the Middle Ages, war was studied in historical terms, and as a craft, in which excellence was a matter of practice and direct instruction. Military handbooks and doctrinal works existed, but they were empirical and antiquarian in character. The only one to survive intact into modern times, *Epitoma rei militaris* by the fourth-century Roman writer Vegetius, was a summary of traditional practices in such matters as drill, fortifications, discipline, and military administration. Vegetius' work was still being read by soldiers a thousand years later, which may well justify its description, in the most recent *Encyclopaedia Britannica*, as 'perhaps the most influential military treatise in the Western world'. Its longevity, however, is a tribute less to its brilliance than to the absence of intellectual competition. Even Machiavelli's *The Art of War* (1521), the most famous book on war produced during the Renaissance, is an attempt to recapture the wisdom of the ancients.

Thereafter, however, a new military literature would arise whose central impulse was **analytic** and **systematic**, rather than descriptive. A variety of cultural influences helped bring this about, above all the increasing prestige of natural science as the pre-eminent form of human knowledge. If nature would yield up its secrets to disciplined enquiry, based upon a combination of close observation and logical reasoning, there was no reason why human affairs should not do so as well. Viewed in this light war,

along with politics, economics, and law, might become something like a scientific enterprise.

This new intellectual orientation was given an additional push, in the military sphere, by institutional changes known collectively as the '**military revolution**'. Its components included the displacement of cavalry by infantry as the most important formation on the battlefield; the introduction of firearms; the development of fortifications capable of withstanding prolonged bombardment by artillery; and, above all, the establishment of standing armies much larger than the feudal levies, urban militias, and mercenary bands of the past. Waging war with such tools required more than courage, common sense, and a firm seat on a horse. Some theory of how to proceed was required, and it was the generals of the new-model armies who would provide it.

One of the first to attempt a systematic account of how to fight in the new conditions was **Raimondo de Montecuccoli** (1609–80), a field marshal of the Austrian Habsburgs renowned for his skill at manoeuvring troops in the field.[2] As is usually the case in writing about warfare, Montecuccoli's views on issues such as the best ratio of pikes to muskets, the proper way to organize a march, or the maximum practicable size for a field army (50,000 men, already a low number when he was writing) have lost their interest except to specialists. It is rather the general structure of his ideas that has exerted enduring influence.

In his own day, Montecuccoli was known for having declared that the sole objective of war was '**victory**'—a seemingly unexceptionable claim, but a challenging one at the time, because it elevated an illusive military abstraction above traditional, socially defined concerns with honour, glory, plunder, and prestige. Montecuccoli did not offer a categorical definition of what victory entailed, though he accepted that 'all possible means' might be employed to achieve it. He also was insistent, at a time when no government possessed anything like a general staff or a military budget, that victory required intense planning and preparation, and huge sums of money.

Montecuccoli, drawing on recent work in international law, was the first military writer to draw a systematic distinction between **offensive and defensive operations**, and between **international and civil war**. The latter contrast has proven especially critical, since, until quite recently, strategic theory has been concerned with international conflict, while taking undue comfort in the notion that other applications of military force must follow the same patterns.[3] Montecuccoli's dismissal of internal war as a subject for analysis represented a radical simplification of reality. The Europe in which he lived had for over a century witnessed a continuous and debilitating struggle for pre-eminence between the French monarchy and the Habsburg empire. This rivalry had involved civil wars, peasant uprisings, and religious strife of every description. Montecuccoli wrote not to capture this reality, but to overcome it. The goal of theory, for him and nearly all his successors, was not to systematize the full range of forms that social conflict might take, but to cut through them, and so, by exerting intellectual mastery, to achieve better practical control. Strategy would be the box within which the violence of war could be contained.

Most of Montecuccoli's work is taken up by operational maxims, expressed in an aphoristic style that would be much imitated as the appropriate way to report the results of scientific inquiry. True knowledge, it seemed, took the form of ideas sufficiently simple

to be expressed in a few sentences. This desire for **simplicity** is understandable. Despite its self-confident didacticism, the new military theory could not conceal the enormous difficulty involved in assembling, moving, and feeding a modern army, whose mobility had not improved in proportion to its size (and would not for another century or more). It was in understanding the motions of bodies in space that contemporary science, from Galileo to Newton, had achieved its greatest triumphs. Military theorists conceived their own problems in similar terms.

The proposition that the secret of military success lay in mastering the laws of motion and the rules of geometry received telling expression in the work of a man best remembered for making the movement of armies more difficult: **Sébastien Le Prestre de Vauban** (1643–1715). Vauban was chief military engineer to Louis XIV, and the person responsible for laying out the fortress system that still guarded France's eastern frontier in 1914.[4] Vauban's fortresses were examples of what are sometimes called 'star bastions' (or '*traces italiennes*', after the country in which they first appeared). Their outstanding feature is an intricate profusion of arrow-head-like structures protruding progressively from a central core. Star bastions had replaced the curtain-walled castles of the Middle Ages because they were equally resistant to artillery and to attack by storm. The key, however, was precision in design. In the old days, the only thing that mattered about a castle's walls was that they be high and thick. In modern fortresses, the complex angles of the walls, required to deflect the penetrating round shot of cannon, and the overlapping fields of fire created by the intricate tracery of salients, traverses, ditches, glacis, ravelins, and outworks, were all matters of exact mathematical calculation, in which tactical issues were resolved, quite literally, into engineering problems.

The same approach applied to the attack, where everything depended on the methodical elaboration of saps and entrenchments which, if properly done, would eventually put the assailant in position to batter through a chosen spot while suffering minimal casualties. All of this was expounded in Vauban's work, which acquired enormous reputation, despite its technical character, because sieges were the characteristic military operations of that time and because modern siegecraft exemplified a **disciplined** approach to fighting that contemporary commanders longed to apply to the operations of armies in the field. If those operations could be reduced to a similar system of linear relationships and orderly procedures, war itself might become something like engineering. The need for actual violence would be reduced, and replaced by patterns of manœuvre whose import would be apparent to both sides. Not for the last time, there were some who imagined that, if war could be subsumed within some mutually transparent strategic rationality, it would cease to be necessary at all. Strategy would not merely organize the violence of war. It would replace it.[5]

Military writing in the eighteenth century attempted to apply the algebraic reasoning of siegecraft to the conduct of **manœuvre warfare**. This proved to be a futile exercise. Even the awkward, slow-moving armies of the Old Regime were too full of life to be treated like bricks and mortar. Yet it produced insights of enduring importance. One revelation had to do with the synergistic effects of **weapons**. Armies of that era comprised infantry, artillery, and cavalry, each of which had strengths and weaknesses in relation to the others. Each was raised and trained separately from the rest owing primarily to the prerogatives of an aristocratic officer corps and the weakness of state finances; this

tendency remained a major barrier to military efficiency. The three 'arms' moved at different speeds, and were desperately vulnerable if forced to fight alone against the combined arms of the enemy. Bringing all three together to good effect was a vexing problem, which was solved by the development of new military formations, later called corps and divisions, in which all arms were combined in a single, integrated body large enough to operate alone for extended periods.

This new force structure also eased the logistical difficulties involved in keeping a large, concentrated force supplied. An army subdivided into units small enough to live off the territory through which it passed possessed a fundamental advantage over one tied to pre-positioned depots by an endless chain of wagons. Once such independent movements had been mastered, new forms for converging attack became possible, as detached formations moved toward the same battlefield—no easy thing given the military communications of the day, but the wave of the future none the less.

It also was recognized that, among all the imaginary lines of movement and position that might be drawn on a military map, the most critical was the one extending from an army to what would now be called its '**base**', the rear area on which it relied for supplies, information, and reinforcements. Because the army itself was the chief means for defending the base, movement away from it—that is, toward the enemy—was fraught with peril, which was perceived to grow not simply with distance, but also as the angle formed by the line of the base and the line of advance changed. Contemplation of this geometry led some to think they knew, within a few degrees of arc, the moment at which prudence gave way to folly and danger. Equally spurious was the related supposition that disrupting an adversary's **communications** was synonymous with defeating his army. There is no question, however, that the new emphasis on operations directed against the enemy's rear was of permanent importance.

From the study of siegecraft soldiers also gained new insight into the nature of victory: that its central characteristic was not destruction, but **disruption**. A bastion falls not because every brick is torn down, but because its structural integrity has been shattered. 'It is the same with strategy as with the siege of fortresses,' the young Napoleon once observed. 'Concentrate fire on a single point: when the breach is made the equilibrium is broken; all the rest becomes useless.'[6] From there, it is but a small step to Clausewitz's still more comprehensive observation, that in war 'minor successes help bring about major ones.'[7]

The climactic figure of this rationalist strategic tradition was **Antoine-Henri de Jomini**.[8] In biographical terms Jomini was a man of another time. He was born in Switzerland in 1779, served as a staff officer in Napoleon's armies, and later rose to the rank of general in the Russian service. His personal military experience thus transcended that of the Old Regime; and so did his writings, at least superficially.

Jomini was the pre-eminent interpreter of **Napoleonic warfare**, in which incremental military innovations in tactics, gun founding, logistics, and map-making, combined with the social and political dynamism of the French Revolution to instil European warfare with a *decisiveness* it had not previously possessed. Until the last years of his rule, Napoleon's armies were not remarkably larger than those of the past; his most brilliant campaign, culminating in the Battle of Austerlitz in 1805, was accomplished with a total force of about 200,000 men, of whom 75,000 were present at the final battle. Nor were his

battles bloodier, if one reckons according to a soldier's chance of becoming a casualty. Napoleon's battles were decidedly more **numerous**, however, and more **consequential**. It was this above all that impressed observers.

The increasing frequency with which Napoleon's armies were able to fight was a result of the revolutionary mobilization of French society, which included the introduction of universal **conscription**, a democratic innovation that France's conservative opponents were loath to adopt. The continuous flow of replacements lowered the risks of pitched battle. One reason these had been rare among the professional armies of the Old Regime was the difficulty of replacing losses. Napoleon's battles also counted for more than those of the past because they were conducted, at the tactical level, in ways designed to destroy the adversary's organizational cohesion and prevent further resistance. Eighteenth-century battles were as violent as any in history, but they did not decide the wars in which they occurred, because the armies of that day were too brittle to risk the ruthless pursuit in which Napoleon specialized. The great battles of the Seven Years War (1756–63) all took place during its first four years; whereas the war itself was finally brought to an end by the exhaustion of all concerned. The war of which Austerlitz was a part, in contrast, ended three weeks later, a tantalizing example of **strategic efficiency** from which, it was hoped, much could be learned.

Jomini attributed Napoleon's success to his superior grasp of a small number of timeless principles. In so doing, he assimilated the Emperor's unnerving career to a familiar intellectual structure. The emphasis on geometry by earlier writers was rendered more flexible and realistic through concentration on the **reciprocal interactions** of opposing armies rather than geographic objectives or terrain features. War was not won by holding ground deemed important, Jomini declared, but by beating the opponent in the field. Although manoeuvre remained the key to victory, its goal was not to substitute for fighting, but to bring it about. Jomini stressed the inherent superiority of the **offensive**, and the importance of seizing the initiative and dominating the enemy. He also identified the need for deception and surprise, and for energetically pursuing a beaten foe. Above all, he insisted that the acme of strategic excellence lay in concentrating superior forces against what he called **'the decisive point'**, with the goal of destroying the enemy army.

It is not always easy, given Jomini's stress upon energetic and aggressive conduct, to recognize his work for what it was: a **conservative** synthesis well suited to the needs of a post-Revolutionary international order that, far from wishing to reanimate the ghost of Napoleon, longed to get the genie of war back into the bottle of professional strategy. In practice, Jomini's ideas made the conduct of decisive military operations terribly difficult. His emphasis on concentrated forces, methodical planning, and secure communications, made the other things he admired—offensive operations, cunning manoeuvre, vigorous pursuit—almost impossible. He himself believed his ideas were best suited to small, well-trained professional armies, the kind of army industrial technology would soon make obsolete. Jomini, who died in 1869, at the age of 90, lived to see the onset of this shift. Yet he remained insistent that the basic **principles of war** exemplified by Napoleon, and codified by Jomini himself, would survive all technological change—a point of view that has been thoroughly vindicated by events. All good armies today profess to base their doctrine and operational methods upon 'principles of war' similar to those Jomini identified (see Box 1.1).

## BOX 1.1 JOMINI: PRINCIPLES OF WAR

The fundamental principle upon which every military combination rests, is to operate with the greatest mass of forces, a combined effort, upon a decisive point. The methods of applying this maxim are not numerous; let us endeavor to point them out.

The first measure is to take the initiative . . . The general who takes the initiative knows what he is to do. He conceals his march, surprises and overwhelms one extremity or a feeble part of his adversary's lines. He who awaits the attack is beaten upon one of his points even before he may be informed of the attack.

The second measure is to direct our movement against the most advantageous feeble part. The choice of that feeble part depends upon the position of the enemy. The most important point will always be the one whose occupation will ensure us the most favorable opportunities and results; for example, positions that tend to give us control of the enemy's communications with his base of operations, or to throw him back upon an insurmountable obstacle, such as a sea, a great river without a bridge, or the territory of a strong neutral power.

In order to operate a combined effort with a strong mass upon a single point, it is important, in conducting the strategic movement, to hold our forces concentrated upon a space nearly square, that they may be more disposable . . .

It is most important, when we take the initiative of a decisive movement, that we should be careful to perfectly inform ourselves of the positions of the enemy and of the movements he can make . . .

It is of the greatest importance that the combined attack of all our forces be simultaneous. It is not the masses present that decide a battle, but those which are brought into action . . .

If the art of war consists in concentrating a superior effort, with a mass against weak portions, it is most indispensably necessary to follow up closely a beaten enemy. The strength of an army consists in its organization, in the unity resulting from the connection of all the several parts with the head or the central power. After a defeat this unity or oneness no longer exists . . . The entire army becomes weak, and [a subsequent] attack upon it is almost certain triumph.

To render the superior shock of a mass attack decisive, it is equally necessary for a general to bestow the same care upon the morale of his army. Of what use is it to bring into action fifty thousand men against twenty thousand, if they lack the impulsion necessary to rush upon and overthrow the enemy? . . . All troops are brave when their leader sets the example [of] true, heroic devotion. It is not well that a soldier should remain under fire from fear of discipline alone, but from pride and self-esteem, not yielding to being outdone by his officers in honor and bravery.

Adapted from Antoine-Henri Jomini, *Treatise on Grand Military Operations* (1816), trans. S. B. Holabird (New York, 1865), vol. 2: pp. 448–59, in John I. Alger, *The Quest for Victory: The History of the Principles of War* (Westport, Conn., 1982), pp. 204–8.

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Jomini is the most influential strategic theorist of modern times. This may seem surprising, given the eventual eclipse of his personal reputation by that of his great contemporary, Clausewitz. Yet the practical impact of Jomini's ideas can hardly be overstated. He rescued the scientific spirit of the Enlightenment from the mechanistic rigidity that threatened to overwhelm it in the military sphere. His insistence that warfare be based upon **universally applicable**, but also **broadly adaptable**, principles, rather than upon a dogmatic system of approved practices, was an intellectual advance of lasting

importance. At the same time, Jomini detached Napoleon's military achievements from their revolutionary roots, and infused military theory with a **political and social naiveté** from which it still struggles to free itself. Jomini's work purported to demonstrate that the essence of military success lay in **rational decision-making**, designed to bring opposing armies together in a sequence of violent clashes whose political implications would be readily apparent. It was a point of view understandably reassuring to those called upon to fight, but one that would scarcely come up to the realities of modern war.

**KEY POINTS**

- Early-modern strategic theory was an attempt to introduce scientific rigour into the conduct of war.
- The goal of strategy is to optimize military effectiveness while limiting the social costs of war, relative to the interests at stake.
- Although it has proven impossible to develop universally applicable rules for the conduct of war, the belief that military success depends upon the observance of a small number of general principles remains widespread to this day.

# Clausewitz and the modernization of war

For Jomini, the wars of Napoleon constituted a clarifying moment, when rules dimly grasped by the greatest soldiers of earlier times were finally made plain to all. It was a broadly persuasive vision. Some, however, saw differently. One who did was **Carl von Clausewitz**. Clausewitz was born in Prussia in 1780. He entered the army as an officer cadet at the age of 12, on the eve of what would prove to be a quarter-century of war against Revolutionary France. Afterwards his career devolved into a series of conventional peacetime assignments, including a long stint as administrative head of the military academy in Berlin, a post that required no teaching, but afforded ample opportunity for study. He died of cholera in 1831, having published virtually nothing. Among his literary remains was the unfinished manuscript of *On War*, which was published by Clausewitz's widow the year after his death.

*On War* is widely regarded as a perplexing text. Part of the difficulty lies in the fact that Clausewitz died before completing his work, so that it contains more incidental inconsistencies and gaps than it might have. Part also lies in his habit of **never considering any action in isolation** from the reaction it inspires, a form of analysis that may appear to introduce contradiction where a synthesis is intended. Still, much of *On War* is presented in a perfectly straightforward way. If propositions like 'every attack loses impetus as it proceeds', or 'war does not consist in a single blow', or 'the only means in war is combat', are judged baffling, it cannot be because they are complicated in themselves.

One source of complexity is Clausewitz's determination to view concepts from every possible angle, and to demonstrate their application by attaching them to **metaphorical**

or historical referents that illustrate his meaning without necessarily exhausting it. A good example is the brilliant and oft-cited passage at the end of the first chapter of *On War*, in which Clausewitz compares war's 'dominant tendencies' to 'a remarkable Trinity, composed', as he says:

of primordial violence, hatred, and enmity, which are to be regarded as a blind force of nature; of the play of chance and probability within which the creative spirit is free to roam; and of its element of subordination, as an instrument of policy, which makes it subject to reason alone.

The first of these three aspects mainly concerns the people; the second the commander and his army; the third the government. The passions that are to be kindled in war must already be inherent in the people; the scope which the play of courage and talent will enjoy in the realm of probability and chance depends on the particular character of the commander and the army; but the political aims are the business of government alone.

These three tendencies are like three different codes of law, deep-rooted in their subject and yet variable in their relationship to one another. A theory that ignores any of one of them or seeks to fix an arbitrary relationship between them would conflict with reality to such an extent that for this reason alone it would be totally useless.

Our task therefore is to develop a theory that maintains a balance between these three tendencies, like an object suspended between three magnets.[9]

Any number of readers have concluded from this passage that the 'Trinity' to which Clausewitz refers is comprised of the people, the army, and the government; and, moreover, that all three must be committed to war, lest the resulting imbalance lead to defeat. Yet this reading is wrong. Clausewitz's Trinity consists of abstractions: **violence, chance, and reason**, all themes that recur repeatedly throughout his work. His association of them with the people, the army, and government, respectively (which, incidentally, does not recur) may appear reasonable, and is certainly worth pondering; yet it does not describe all the possibilities even in Clausewitz's day, much less throughout history. Clausewitz's own studies of Napoleon's campaigns leave no doubt that the 'blind force of nature' propelling French armies across Europe did not come from the French people, but from Napoleon himself, in whom the functions of 'army' and 'government' combined. Similarly, Clausewitz's assertion that all elements of the Trinity deserve equal consideration is qualified at once by the observation that, despite their logically co-equal status, *no fixed relationship* could be established among them. This warning might have made more of an impression if it had not been followed by an elegant but misleading reference to theory 'balance[d]' among three magnets, again suggesting a condition of equilibrium where none is required: it is, after all, perfectly possible to suspend an object among magnets of unequal strength.[10]

Despite its rhetorical difficulty, *On War* remains the greatest work on its subject yet written. Its subject, however, is *war*, not *strategy* per se. For Clausewitz, the expansion of war during his lifetime represented a call, not to perfect received ideas, but to reconsider first principles. Although Clausewitz has much to say about how war should be conducted, such matters are of secondary importance, and are addressed by way of illustrating and fleshing out more fundamental arguments. His governing concerns are **cognitive** and **phenomenological**. *On War* sets out to show what war is, what it does, and how it can be known. It is not a book about how to fight. It is a book about *how to think about war*.

Part of what sets Clausewitz's work apart is its attitude toward the past. The rise of natural science invigorated the study of human affairs by providing a new model of intellectual rigour and excellence. It also helped dissolve the notion, prevalent throughout the Middle Ages and into the Renaissance, that Western history was a story of decline from the achievements of Greece and Rome. With the advent of the new science, history became a tale of progress, in which each generation profited from the experiences of previous generations. It was in these terms that Jomini thought about Napoleonic warfare: it was the culmination of a long process of trial and error, leading at last to a breakthrough from which durable conclusions could be drawn.

For Clausewitz, however, the fact of historical change did not present a story of progress. It testified to the instability of human affairs and the limitations of human knowledge. The past did not point toward the present, but was simply itself, coherent in its own terms but no more. It was not possible, for instance, to declare Napoleon a better general than Frederick the Great, as Jomini routinely did, simply because Napoleon conquered more territory, won more battles, or commanded more powerful armies. Such perceived superiority, in Clausewitz's view, was the product of social and political conditions that had not existed in Frederick's time, and would not last forever. The future would render Napoleon's methods as obsolete as those of Frederick or, for that matter, Attila the Hun. The goal of theory therefore could not be to define the *ideal form* that war should take, so that soldiers might strive to achieve it. The best that could be hoped for were theoretical insights that could improve our understanding of war *as it really happened*.

The question posed by history for theory was thus not 'Where does all this lead?' but rather 'What factors govern war in all its forms?' Most basic, and the starting point of Clausewitz's analysis, is **violence**: war is a violent clash of wills, whose defining features arise from the mutual antagonism of the opponents. If one holds this proposition up against the historical record, however, a question arises. There is nothing in the idea of violence itself that would limit its scope. Yet the violence of war is obviously limited by any number of practical difficulties—which Clausewitz characterized as 'friction'—and often by the goals of the belligerents. While all wars were a clash of wills, the issues at stake might not always justify the maximum use of force. War, it seemed, had a 'dual nature': most were fought for *limited purposes*, and employed *limited means*. A few were fought to overthrow the enemy completely, in which case violence might approach the highest level that the resources of the belligerents would allow. Either way, however, there was no doubt of war's subordinate status: it was 'simply a continuation of political intercourse, with the addition of other means'.[11]

In appraising his own work, Clausewitz said that its main value lay not in its conclusions, but in the way they were arrived at. One distinctive feature of his method is a pronounced realism, a refusal to make things simpler than they are to expedite the task of reasoning about them. This impulse is exemplified by the concept of 'friction', a metaphor from the world of engineering, by which Clausewitz sought to grasp an aspect of war that was normally ignored: the tendency of things to go wrong, far more disastrously than they do ordinarily.[12] War, Clausewitz observed, involved action in a resistant medium, like walking underwater. Some might think that the surest path to clarity is to ignore incidental difficulties, in the same way that a scientist seeking a consistent pattern

or 'signal' within a mass of data ignores the 'noise' that surrounds it. For Clausewitz, however, it was unrealistic to adopt such an attitude toward war, in which the effects of **chance** are so profound that they become the central reality, and not simply a distraction.

A similar approach underlies the related concept of **'genius'**, the term Clausewitz used to describe the elements of character and intellect that make for success in military commanders. 'Genius' is the intelligence and willpower of the commander that moves the machinery of war forward, despite the friction that impedes it. For Clausewitz, 'genius' did not imply exceptional ability. On the contrary, even modest success in an environment dominated by chance and danger cannot be achieved through the application of fixed rules and procedures. Like many other writers on war, Clausewitz sometimes compared war to art, another field in which technical expertise is not sufficient to ensure success. The point, however, was not merely to affirm that mental flexibility is a virtue in soldiers, but to insist again on the subordination of theory to reality: 'what genius does', Clausewitz wrote, 'is the best rule, and theory can do no better than show how and why this should be the case.'[13] As in art, true excellence in war cannot be taught, only cultivated, and studied with as few preconceptions as possible.

Clausewitz was intensely preoccupied with the *psychological* dimensions of war, ranging from the communal passions and political ambitions that animate military violence, to the fear and courage that accompany its use, to the insights or mistakes that genius, or the lack of it, may contribute to victory or defeat. This concern is illustrated by another of his habitual metaphors, that of *war as a game*. Analogies between war and games are usually intended to capture war's formal properties. Chess, the greatest of all Western 'war games', has precisely this character. Clausewitz, however, preferred to compare war not to chess, with its subtle positional strategies, but to gambling at cards, where the rules are simple and the **calculation of risk** is everything. If the first question of strategy is 'What is the war about?' the second, in a Clausewitzian spirit, would have to be 'How much do you want to bet?' (See Box 1.2.)

Clausewitz's conviction that war was first and foremost a gamble defined his approach to strategy, in which the inherent tension between the goals of policy and the violence of its chosen instrument must somehow be reconciled. The primacy of politics meant that there could never be a purely military solution to any strategic problem. Military objectives derived from political purposes, and strategic plans should in turn be defined by, and proportionate to, the objective. Yet it also was true that war's **escalatory character** could impress itself upon policy. Although one side's political goals might justify only a modest military effort, the passions that violence inspired, as each antagonist sought to outdo the other, would push against such limits, raising the stakes. Such complex interactions are always central to Clausewitz's thinking. Risk and reward, attack and defence, friction and genius, reason and chance, strategy and politics—these and other interdependent concepts weave their way throughout his work, and provide its essential structure. Each interacts with, and is defined by, the other. None, Clausewitz would have insisted, should ever be thought about alone.

If Jomini represents the apex of the **classic** tradition of strategic theory, in which the deep, permanent structure of military action takes centre stage, Clausewitz is the great **modernist**, for whom, as Marx said, 'all that is solid melts into air', and one is left to

## BOX 1.2  CLAUSEWITZ: FRICTION, CHANCE, AND GENIUS

Clausewitz's strategic assessments often differed from the conventional wisdom of his day (and ours), in part because of the unusual weight he accorded to psychological and political factors in war. This is illustrated in the conclusion to his *History of the Campaign of 1812 in Russia* (1814–23). Most observers believed that Napoleon's famous defeat was a foreseeable result brought about by objective conditions—the vastness of Russia, the coldness of winter, and so on. For Clausewitz, however, Napoleon's failure demonstrated the complex interaction between military genius and the uncertainties of war.

Finally, the author would like to offer his opinion on Bonaparte's plan of operation in this much-discussed campaign.

Bonaparte wanted to conduct and conclude the war in Russia as he had conducted and concluded all his campaigns. To begin with decisive blows and to employ the advantages he gained from them to achieve further decisive battles, always placing his winnings on the next card until the bank was broken—*that was his way*, and it must be said that he owed the tremendous success that he had achieved only to *this* way; his degree of success was scarcely conceivable by any other means . . .

To defeat the enemy's army, to destroy it, to occupy his capital, to drive the government to the farthest corner of the country, and then in the chaos that followed to win the peace—that until now had been the operational plan of all his wars. In Russia he had the vastness of the country against him and the disadvantage of two widely separated capitals [Moscow and St. Petersburg]. These circumstances would diminish the *psychological* effects of his victories, a loss that he probably hoped would be made up by two other factors: one was the weakness of the Russian government, its lack of energy and ability; the other, the dissension that he might be able to sow between the nobility and the crown. This is why he was so disturbed when he found Moscow abandoned and destroyed. From Moscow he had hoped to influence opinion in St Petersburg and the rest of Russia.

That under these circumstances Bonaparte should have attempted to reach Moscow in one thrust was only logical.

The effects of Russia's vast territory and of a possible popular war—in short, the weight of a great state with all its powers—could only make themselves felt gradually and might prove overwhelming if he did not master them at the first attempt.

[Even] if Bonaparte . . . had to count on two campaigns to win the war, it still made a great difference whether or not he reached Moscow in the first. Having occupied the capital, he might hope to undermine preparations for further resistance by employing the power that remained to him, the power to impress, to lead public opinion astray, to turn people's feelings against their duty . . .

These seem to us the natural conceptions of a man like Bonaparte. It is simply a question of whether one can say such a plan would not work in Russia, and whether another might have been better.

We do not believe so. To defeat the Russian army, disperse it, and occupy Moscow was a goal that could certainly be achieved in one campaign; but we believe that this goal omits one further, essential condition: *to remain strong even in Moscow.*

We believe that Bonaparte neglected this last consideration solely out of the arrogant recklessness that was characteristic of him. He reached Moscow with 90,000 men—and should have reached it with 200,000 . . .

What of the other plan, which after the event some critics held to be more reasonable or, as they prefer to characterize it, more methodical?

BOX 1.2 continued

Bonaparte should have halted his advance at the Dnieper and Duna [rivers], or at least concluded the campaign with the occupation of Smolensk; then establish himself in the occupied territory and secure his flanks to achieve a better base of operations; arm the Poles, to increase his striking power; and march on Moscow in the following campaign, with a better start and more staying power . . .

That would have meant ending the [first] campaign without having defeated the Russian army, which would have remained more or less intact, with Moscow not even threatened. The Russian forces, which were still weak at the start of the campaign, and which would nearly double during its course, would thus have had time to prepare and during the winter begin an offensive against the vastly extended French defenses . . .

Setting all this aside, however, we will concede the possibility that such a campaign might have achieved its goal and prepared the ground for further gains in the following campaign. But we must also consider matters as they appeared from Bonaparte's perspective: that he found the Russians only half prepared; that he brought a huge preponderance of force against them; that he might gain a victory that would give his whole enterprise that cataclysmic rapidity so essential to paralyzing the enemy; that he could be fairly certain of reaching Moscow in one stride, with the *possibility* of having peace in his pocket in three months. If we consider all this, and compare these possibilities with the results of a so-called methodical campaign, it seems very likely that Bonaparte's plan held a greater probability of ultimate success than the other, and that his was the correct way—not the *more daring*, but in fact the *more cautious* of the two . . .

The dangers of the moment always exert the most powerful influence on men, and therefore it often happens that an action seems audacious which in the end proves to be the only road to safety, and which is therefore the most prudent course. Mere intelligence is rarely sufficient to allow men to rise to this level of insight; it is for the most part a natural boldness of character that equips an individual to discern such prudent paths. This boldness was so much a part of the great conqueror that he would have chosen the most audacious course from pure inclination, even if his genius had not also shown it to be the wisest.

We repeat, everything that he was he owed to his daring and resolute character; and his most triumphant campaigns would have suffered the same censure as this one, had they not succeeded.

From Peter Paret and Daniel Moran, ed. and trans., *Carl von Clausewitz: Historical and Political Writings* (Princeton, 1992), pp. 201–4, emphasis in the original.

reason with what Clausewitz called 'variable quantities'.[14] Among the generations of soldiers that have followed him, the appeal of his work has lain primarily in its emphasis upon psychological elements, and upon the preponderant role of uncertainty and chance in war. The rapid increase in firepower that followed the introduction of rifled weapons in the 1840s meant that armies would grow much larger, while adopting decentralized tactical methods that put a premium upon initiative and spontaneous insight at all levels of command. On the other hand, the simultaneous expansion of military planning, by which the imponderables of the ever-expanding battlefield were supposed to be tamed, reintroduced much of the intellectual rigidity Clausewitz disdained; while the (for a time commonplace) proposition that superior morale was an antidote to the lethality of modern weapons would have struck him as the last word in absurdity.

The mechanization of war also strengthened the technocratic and managerial ethos of

military officers, and with it their natural resistance to Clausewitz's most essential proposition: that war is permeated by politics. Although soldiers in democratic countries have come to accept their subordination to civilian authority as a constitutional principle, the actual introduction of political considerations into the planning and execution of military operations is still invariably regarded as interference in an activity best left to a professional officer corps.

**KEY POINTS**

- Clausewitz's outstanding characteristic as a theorist is his concern with the role of chance, human personality, and other imponderables in the conduct of war.
- Clausewitz regarded war as permeated by politics, not simply in its origins, but in all aspects of its conduct.
- For Clausewitz, strategic theory is chiefly concerned with the real-life interactions of adversaries, and with the dynamic interaction of complementary concepts, rather than with the development of ideal models to which practitioners should conform.

# Beyond the battlefield: Sea power

In the second half of the nineteenth century serious thinking about land warfare was dominated by problems posed by new technologies—rifled weapons, railways, telegraphic communications—that increased the ability of armies to inflict casualties. The small, well-trained forces that prevailed in the immediate post-Napoleonic period were replaced by **mass armies** of conscripts, whose **rapid initial mobilization** was judged strategically decisive. Once vast numbers of indifferently trained citizens in arms were in the field grappling with each other, the chances of reaching a politically useful result were regarded as slim. By contrast, if a fully mobilized army equipped with modern weapons could fall upon an unready opponent, swift victory seemed assured. Speed was of the essence, because of the risk of stalemate once defensive lines stabilized, and because the **social costs** of war were thought to have increased. The same technology-driven processes that made warfare more deadly had (to all appearances) made advanced societies more fragile, because of their dependence upon international markets and suppliers, and because of the rising importance of industrial workers, who might seize upon protracted war as an opportunity to force revolutionary social or political change.

The burden of strategic theory on the eve of the First World War was thus to preserve war's usefulness as an instrument of policy in the face of rising pressure from two sources: **industrial technology** and **capitalism**. As applied to land warfare, the effect was to concentrate attention on tactical and organizational issues. Strategy remained a matter of relational manœuvre by regular forces in space and time, in which the key problem was what to do as the space grew larger, the forces more deadly, and the time shorter. Strategic success became identified with tactical success, above all with

prevailing in the first great clash of arms at the outset of a war, from which all subsequent results would follow.

These same technical and economic forces also impressed themselves upon **navies**, whose activities previously had been of no great interest to military theorists. In the Age of Sail, naval warfare was a more technically demanding problem than war on land: building, maintaining, and fighting sailing warships required all kinds of specialized knowledge, plus a capital-intensive infrastructure far more elaborate than that required to field a good army. Yet naval war had never been subjected to comprehensive analysis, since its strategic effects were thought to be reasonably well accounted for by another emerging field of social theory: **economics**.

Sailing navies were the instruments by which European empires were created. Water also was the only avenue over which large quantities of goods could be moved. These facts defined the basic role of navies in war, which was to disrupt the seaborne commerce of the other side while protecting their own trade. The resulting deprivation, accumulating over years, might contribute to an adversary's decision to sue for peace, and was worthwhile anyway to the extent that resources that had once been theirs would now become yours. But even granting all that, the means by which such slowly mounting pressure was applied seemed to be of limited importance.

War at sea was a natural strategic expression of the economic competition between states: the pursuit of commerce by other means. This conformed to the dominant economic outlook of pre-industrial Europe, known as 'mercantilism', which defined economic success in terms of the accumulation of assets under a state's control. In the absence of self-sustaining economic growth, material life was regarded as a zero-sum game, in which the interests of all states conflicted. To mercantile theorists like Louis XIV's great minister of finance, Jean-Baptiste Colbert (1619–83), the founder of the modern French navy, trade, piracy, and war all ran together along a single continuum of rivalry and conflict.

One of the achievements of early capitalist economics was to challenge these concepts, thereby ushering in a new, if strategically problematic, understanding of the relationship between war and a state's economic interests. Market theorists like Adam Smith (1723–90) and David Ricardo (1772–1823) identified a society's economic success not with hoarding wealth, but with mutually beneficial exchange and the circulation of money, two processes that operated most efficiently when least disrupted by government action.

It soon became apparent that these new ideas might force a revision of strategic thinking. Capitalists calculated the cost of war on less favourable terms than their mercantilist predecessors. In addition to the direct expense of maintaining navies and armies, and of suffering destruction and death, they added large intangible expenses, caused by the disruption of commerce, forgone investment, and the tendency of war to go hand in hand with protectionist trade practices. These 'opportunity costs' were, in aggregate, an immense tax upon organized violence—more economically significant, it was argued, than the immediate suffering war caused. From the point of view of free-market economics, war was no different from other misguided practices, like excise taxes or the licensing of monopolies, in which governments engaged only because they were ignorant of the true costs.

Those professionally concerned with the conduct of war were not prepared to concede

that the 'final argument' of international relations had somehow relocated from the battlefield to the marketplace. Yet strategy could not but take account of new material conditions, of which the new economics was merely a theoretical expression. On land, the response was to focus attention upon the swift destruction of the organized forces of the enemy, and to underline the **efficiency of new technology**, whose increased lethality was purported to make war less destructive by making it shorter. On the high seas, however, a more searching appraisal was called for. It was not possible to disentangle maritime war completely from the civil commerce that surrounded it. It was, however, possible to provide it, for the first time, with an explicit theoretical foundation, upon which new claims for naval warfare's decisiveness and economic rationality might be based.

**Alfred Thayer Mahan**, an American naval officer, sought to do for naval war what Jomini had done for war on land: define its basic principles, from which operational methods could be derived. Mahan proposed that what he called '**sea power**' was the key to world history, and the central feature of modern war. No nation cut off from its normal overseas suppliers and markets could wage industrialized war for long; one that 'commanded' the sea could do what it wished militarily, while continuing to afford its people the material goods to which they were accustomed. To command the sea meant to drive the enemy from it, a task that could only be accomplished by a **battle fleet** that comprised the most powerful ships available. No lesser naval force could stay in the same water with such a fleet, and its ability to go anywhere meant that, once its supremacy was secure, its influence would become general. The crucial step in securing command of the sea was thus to *defeat the enemy fleet*, which should be crushed in battle (or bottled up in its harbours) at the earliest possible moment.

Mahan's conclusions were based on historical study, chiefly of the great contest for global supremacy fought out between France and Great Britain between the wars of Louis XIV and those of Napoleon.[15] Mahan attributed Britain's eventual triumph to its consistent ability to defeat the French fleet in battle. Without such victories, Mahan believed, it would have been impossible for the British to blockade the French coast or harass its trade. This was, to say the least, a selective reading of a complex period, a point made with great force by the British writer **Julian Corbett**.[16]

Corbett, like Mahan, affirmed the strategic importance of navies, while following Clausewitz in insisting that the actual exercise of sea power was a more diversified business than Mahan claimed. At no time during the period Mahan had studied, for instance, had the French navy ceased to operate, while most naval actions had been fought by single ships and small squadrons. Nor did great battles prove decisive at the strategic level. The last 'fleet action' of the Napoleonic Wars, Trafalgar, occurred ten years before Waterloo, and involved only a small fraction of the ships available to both sides. For most of that subsequent decade France and its allies still had more warships than Great Britain did. It was only continuous pressure by dispersed British squadrons that had prevented those resources from coalescing into a force capable of threatening Britain itself. In the end, Corbett proposed, it was on the battlefield that British sea power had made its greatest contribution:by cutting off Napoleon's army in Egypt, while sustaining that of Wellington in Iberia, and above all by protecting the trade and colonial possessions that provided the money with which Britain paid the expenses of the continental armies that

finally brought Napoleon down. Navies, Corbett concluded, might weigh heavily in war, but their strategic effects were **inherently indirect, attritional**, and **time-consuming**.

Corbett was the superior historian and the better prophet. Yet Mahan's outlook proved more persuasive, in part because it glossed over some of the practical limitations of steam-and-steel warships. Such vessels possessed irresistible tactical advantages over their wooden-hulled predecessors, but lacked the range and staying power of ships that required no fuel. Close **blockade**, long the classic expedient of strong navies, was ruled out by the inability of the new warships to stay on a blockade station for long periods of time, and by new weapons—long-range coastal guns, underwater mines, and torpedoes—that made it exceedingly dangerous to bring modern ships close to a hostile shore. By contrast, the classic expedient of weak navies, **commerce raiding**, was despised by the (increasingly influential) commercial interests of all nations, and was deemed a waste of resources, since the small, fast ships required to perform that mission were of no use in an encounter between battle fleets. In truth, the industrialization of navies had transformed them into great, powerful beasts with short legs and poor eyesight, best suited to fight each other. Mahan's conception of sea power (see Box 1.3) explained why that was precisely what they should do, while leaving the world's commerce in peace.

Mahan's work, far more than that of any earlier writer on strategy, attracted a wide readership among civilians fascinated by a vision of global politics that only navies could create, based upon a high-tech infrastructure of canals, coaling stations, dockyards, and steel mills. Later on his reputation would decline, because the future failed to live up to the expectations his books inspired. The battle fleets of the Great Powers did not determine the outcome of the First World War, while the advent of seagoing submarines rescued commerce raiding from the dustbin of history, and turned it into what appeared for a while to be a war-winning strategy. A similarly disconcerting pattern followed in the Second World War, in which naval warfare by the winning side was dominated by **commerce protection** and **amphibious operations**, two missions that Mahan had deemed strategically obsolete.

The Industrial Revolution proved to be less favourable to the interests of navies than Mahan imagined. Although the progressive globalization of the world economy increased the value of the goods that moved across the oceans, and so the value of 'commanding' those oceans in war, it also introduced new modes of transportation—railways, paved highways, eventually aircraft—that reduced the relative advantages of movement over water, and contributed to the growth of integrated continental economies highly resistant to the effects of prolonged deprivation. But even so, navies had less reason to be disappointed about the future than armies did. Neither of the world wars was settled by a great initial clash of arms, and in the end victory in both (and in the Cold War that followed) went to alliances that included the great maritime democracies, which held on long enough to mobilize a crushing material superiority. Sea power thus remains an important theoretical conception, less because its possession ensures victory than because its absence has proved to be disproportionately associated with defeat.

## BOX 1.3 MAHAN: SEA POWER

Alfred Thayer Mahan coined the term 'sea power', and identified its central expression as the massed battle fleet. This basic idea is set forth concisely in the following passage, from a work written at the height of the naval rivalry between Germany and Great Britain, which preceded the outbreak of the First World War. Mahan's view of the strategic issues was shared by both the British and German admiralties at the time.

In naval operations [decisive] successes are wrought less by the tenure of a [geographic] position than by the defeat of the enemy's organized force—his battle fleet. The same result will follow, though less conclusive and less permanent, if the fleet is reduced to inactivity by the immediate presence of a superior force; but decisive defeat suitably followed up, alone assures a situation. As has been remarked before, the value of any position, sea or land, though very real, depends upon the use made of it; that is, upon the armed forces which hold it, for defense or offense. The sea is not without positions advantageous to hold; but peculiarly to it, above the land, is applicable the assertion that the organized force is the determining feature. The fleet, it may be said, is itself the position. A crushing defeat of the fleet, or its decisive inferiority when the enemy appears, means a dislocation at once of the whole system of colonial or other dependencies, quite irrespective of the position where the defeat occurs. Such a defeat of the British navy by the German in the North Sea would lay open all English colonies to attack, and render both them and the mother country unable to combine effort in mutual support. The fall of any coast position in the [British] Empire would then become a question only of time and of the enemy's exertions, unless the British navy should be restored. Until then, there is no relieving force, no army in the field. Each separate position is left to its own resources, and when they are exhausted must succumb . . . . On the other hand, so long as the British fleet can maintain and assert superiority in the North Sea and around the British Islands, the entire Imperial system stands secure. The key of the whole is held [by], is within, the hulls of the ships.

  From Alfred Thayer Mahan, *Naval Strategy Compared and Contrasted with the Principles and Practice of Military Operations on Land* (Boston, 1911), pp. 175–8.

## KEY POINTS

- The conduct of war at sea has always been influenced by economic ideas and interests.
- The traditional goal of naval strategy, as set forth by Mahan, is to command the sea by means of a superior battle fleet.
- In practice, the strategic effects of sea power almost always take time to be felt, a characteristic at odds with the modern desire to limit war's effects by seeking swift victory.

# Imagining Armageddon: Air power

The strategic analysis of sea power was the most important theoretical achievement of the decades preceding the First World War. Afterwards, interest shifted to **war in the air**, the most striking military innovation of the early twentieth century, and one whose theoretical implications have proven exceptionally challenging. Here one encounters a unique intellectual pattern, in which theory, rather than scouring the historical record for useful precedents (of which there were none) has often boldly anticipated practice.

From the moment hot-air balloons were invented in the 1780s, observers had no difficulty devising military uses for them, ranging from the sudden descent of airborne troops, to great contests between what Tennyson called 'airy navies, grappling in the central blue', while dispensing a 'ghastly dew' on those left helpless on the ground ('Locksley Hall', 1842). Except for a few experiments with observation balloons, however, such applications remained fanciful for over a century, until machinery was developed to steer 'air ships' independently of the wind. In 1908 the English novelist H. G. Wells could imagine an armada of German dirigibles crossing the Atlantic to devastate New York City (*War in the Air*, 1908). By then the real embodiment of air power—the aeroplane—was not quite five years old. Yet all of its military uses, from scouting to strategic bombing, had already been foreseen by an eager, if overly sanguine, public.

The First World War provided practical experience against which expectations could be tested. Tens of thousands of military aircraft were produced between 1914 and 1918. Most were employed in **reconnaissance**, or in the related task of shooting down enemy planes. Larger aircraft also were built, and by the end of the war all major belligerents (except the United States) had suffered civilian casualties from aerial bombing. Ground attack aircraft featured prominently in the last German offensive of 1918, and would have in future allied operations had the war gone on longer. Aeroplanes also played their part at sea, delivering mines and torpedoes, scouting for surface fleets, and hunting submarines. Although aeroplanes were nowhere decisive, their ubiquity and versatility were impressive.

The theory of air power arose from trying to draw the lessons from these evocative experiences. The most important early commentator was an Italian artillery officer, **Giulio Douhet**, whose *Command of the Air* (1921) (see Box 1.4) established a number of propositions that have proven central to all subsequent discussions of its subject. Douhet believed that the Great War demonstrated the futility of offensive ground operations, the only form of military action that had ever promised a decisive strategic result. In the air, however, everything favoured the attacker, a conclusion justified less by the still-modest striking power of aircraft than by the apparent difficulty of shooting them down. Wars in the future would therefore begin with all-out air offensives against the enemy's cities, with the goal of delivering a *psychological shock* so profound that the government would have no choice but to surrender. Although some might cavil about the inhumanity of such action—deliberate attacks on civilians are a war crime under the Hague Convention of 1907—Douhet was sure that no belligerent would forgo the advantages of a pre-emptive blow, if only because the only way to avoid being on the receiving end was to

BOX 1.4 **DOUHET *COMMAND OF THE AIR***

To have command of the air means to be in a position to prevent the enemy from flying while retaining the ability to fly oneself. . . . An aerial fleet capable of dumping hundreds of tons of bombs can easily be organized; therefore, the striking force and magnitude of aerial offensives, considered from the standpoint of either material or moral significance, is far more effective than those of any other offensive yet known. A nation which had command of the air is in a position to protect its own territory from enemy aerial attack and even to put a halt to the enemy's auxiliary actions in support of his land and sea operations, leaving him powerless to do much of anything. Such offensive actions can not only cut off an opponent's army and navy from their bases of operations, but can also bomb the interior of the enemy's country so devastatingly that the physical and moral resistance of the people would also collapse. . . .

To conquer the command of the air means victory; to be beaten in the air means defeat and acceptance of whatever terms the enemy may be pleased to impose. . . .

From this axiom we come immediately to this first corollary: In order to assure an adequate national defense, it is necessary—and sufficient—to be in a position in case of war to conquer the command of the air. And from that we arrive at this second corollary: All that a nation does to assure her own defense should have as its aim procuring for herself those means which, in case of war, are most effective for the conquest of the command of the air. . . .

Any diversion from this primary purpose is an error. In order to conquer the air, it is necessary to deprive the enemy of all means of flying, by striking at him in the air, at his bases of operation, or at his production centers—in short, wherever those means are to be found. This kind of destruction can be accomplished only by aerial means, to the exclusion of army and navy weapons. . . .

Victory smiles upon those who anticipate the changes in the character of war, not upon those who wait to adapt themselves after the changes occur. In this period of rapid transition from one form to another, those who daringly take to the new road first will enjoy the incalculable advantages of the new means of war over the old. This new character of war, emphasizing the advantages of the offensive, will surely make for swift, crushing decisions on the battlefield. . . . Those who are ready first not only will win quickly, but will win with the fewest sacrifices and the minimum expenditure of means.

From Giulio Douhet, *The Command of the Air*, trans. Dino Ferrari (New York, 1942; repr. Washington, 1983), pp. 24–30.

beat the enemy to the punch. The result, in any case, could scarcely be more barbaric than the slaughterhouse of the Western Front.

Douhet's analysis begged a number of important questions. It was not obvious, for instance, exactly how the psychological effects he imagined, should they occur, would make themselves felt upon a government, particularly one not dependent upon democratic public opinion; nor whether a regime thus delegitimized would still be able to come to terms. The result of Wells's imaginary attack on New York had been, not peace, after all, but civil and guerilla war. Advocates of air power in maritime countries, such as Hugh Trenchard in Britain and Billy Mitchell in the United States, were inclined to conceive of strategic bombing less apocalyptically, as a means to wear away the enemy's material resources. In this view, air strategy would focus on the **destruction of war industries** and **civil infrastructure** over an extended period. Such a methodical

approach rejected Douhet's speculative social psychology in favour of ordinary strategic rationality: the losing side would be the one that first decided that suffering further bombardment was too high a price to pay for whatever interests it had at stake.

In continental countries with strong traditions of land warfare, air power was seen less as an alternative to tactical stalemate than as a solution to it. Although no one was prepared to dismiss strategic bombing out of hand, strategists in Germany and the Soviet Union were more inclined to view aircraft as something like **flying artillery**. Aircraft in this role might bring about a decisive engagement on the ground before the effects of strategic bombing, however conceived, could begin to take hold. In these terms, air power did not make land warfare irrelevant. It simply provided the lubricant for a revival of offensive ground operations.

All these promises seemed to be equally well redeemed by the experience of the Second World War, which began with German forces sweeping across Europe, supported by large wings of ground-attack aircraft. Yet the war did not end quickly, and as it dragged on strategic bombing came to seem less an antidote to attrition than one of its instruments. The climactic annihilation of Hiroshima and Nagasaki incorporated just the kind of moral shock Douhet had foreseen. Yet the fact that these blows had come at the end of years of grinding struggle, against an adversary with no means to respond, made their impact difficult to discern amidst the general rubble.

Similar ambiguities confronted sailors, who, like their counterparts on land, recognized that aircraft might be used to solve such traditional problems as reconnaissance and commerce protection. 'Sea power' and 'air power', however, were often viewed as rival conceptions, contending for the honour of having displaced land armies from the centre of strategic calculation. Their convergence in the form of the modern aircraft carrier would transform naval tactics, but not naval strategy. In the Second World War carriers replaced battleships as the capital ships of modern navies because aircraft could perform the functions of naval guns more effectively. Yet the very survival of the idea of the **'capital ship'**, itself a relic from the Age of Sail, suggests strong continuity with the past. Warships now fought each other at vastly greater ranges, but for a familiar purpose: to command the sea.

**KEY POINTS**

- The central problem of military theory in the twentieth century was to understand the impact of aircraft on war.
- 'Strategic' bombing—the use of aerial bombardment to achieve direct political effects, independent of land and sea forces—has not proven as uniformly decisive as its early enthusiasts hoped.
- Air forces are the indispensable enablers of modern combined-arms operations.

# Total war, people's war, and the crisis of theory

It is a nice question whether the atomic bombs dropped on Japan in August 1945 were an expression of air power, sea power, or the continued vitality of combined-arms land warfare. All three were certainly needed to get the bombs to their targets. Afterwards, however, doubts emerged about whether any of them would ever work properly again in the age of **nuclear weapons**, whose power, it was quickly suspected, would make all other forms of warfare irrelevant. Yet the connection is in some respects only symbolic. Upwards of fifty million people died in the Second World War, of whom only a tiny fraction were killed by atomic bombs. Even had the latter never existed, sane observers would have wondered whether 'organized violence' had become such a hopeless oxymoron as to render the pretensions of strategy vain.

From Montecuccoli to Douhet, the central promise of strategic theory had been to **preserve war's political utility by limiting its social costs**, and subordinating its violent character to rational control. Every intervening expansion in the speed, range, and lethality of weapons had been interpreted as an *improvement in military efficiency*, whereby war could do its work, decide the 'final argument', more effectively. The mass armies that were required to absorb the impact of the new weapons were seen in much the same light. They ensured that modern wars would be short and sharp by introducing a self-limiting social dynamic: industrial economies could not stand the strain of protracted conflict, but would quickly cease to produce the military wherewithal necessary for the war to continue. This was the *most calamitous strategic miscalculation of modern times*, and one based entirely upon social presumption, rather than professional military expertise.

In the aftermath of the world wars it had become reasonable to wonder whether all the mental energy expended upon the conduct of war could do more than alter its surface features. As drawn on a map, the Second World War had looked quite different from the First: no trenches to memorialize futility this time, but rather a war of fire and movement, with fleets of aircraft blackening the sky, and great ships plying the waters of the world. Yet the result had been the same: superior economic resources and social resiliency had proven more important than any strategy the armed forces could dream up. The final blow had been delivered by a weapon whose power obviously exceeded the requirements of any rational policy. Afterwards, the world found itself beset by waves of **vernacular and revolutionary violence** whose methods bore little resemblance to those endorsed by military professionals, and against which even the atomic bomb offered no remedy.

In some respects, the problem resembles one that arose, at about the same time, for Newtonian physics, from which early-modern social theory drew inspiration. Newton and his colleagues believed that the laws of nature as they understood them were valid everywhere: universality was for them implicit in the very ideas of 'theory' and 'law'. Later, potentially disconcerting discoveries—for instance, that the sun was not the centre of the universe—were accommodated through a process of theoretical inflation, by which new observations, made possible by a combination of better technology and human ingenuity, were assimilated as **marginal or exceptional cases** within an established paradigm.

As a consequence, physics at the end of the nineteenth century had come to resemble a

system of empirical expedients, rather than a robust intellectual structure. Over the next few decades, however, the root of the problem was finally exposed: the physics of inter-stellar space on the one hand, and of sub-atomic particles on the other, turned out to be unlike what Newton had supposed, and also unlike each other. Afterwards, physics would remain a coherent field of inquiry. Yet it does not at present contain any body of theory that works equally well for all three realms: the very large, the very small, and the middle-sized world of ordinary experience in between.

For strategists, the realm of the very large is often described as '**total war**', a phrase that covers at least two general possibilities: war with nuclear weapons or by other exception-ally destructive methods; but also war in which the broadest possible range of social energy and resources are harnessed to military effort. Both share the quality that the means of fighting threaten to overwhelm the ends for which they are applied. Clause-witz, for whom the interaction of ends and means was always central, was among the first to recognize that such wars might be the wave of the future. In his own time, he believed,

war, untrammeled by any conventional restraints, had broken loose in all its elemental fury. This was due to the people's share in the great affairs of state. Will this always be the case in the future? . . . Such questions are difficult to answer, and we are the last to dare to say so. But the reader will agree with us when we say that once barriers—which in a sense consist only in man's ignorance of what is possible—are torn down, they are not so easily set up again.[17]

Clausewitz said that his discussion of what he called 'people's war', although unique in the literature on war up to then, was 'less an objective analysis than a groping for the truth', because such wars were not yet common. For a glimpse of that truth, however, we may contemplate Clausewitz's description of the choices facing a society left naked to its enemies because its armies have been defeated:

There will always be time enough to die; like a drowning man who will clutch instinctively at a straw, it is the natural law of the moral world that a nation that finds itself on the brink of an abyss will try to save itself by any means.

No matter how small and weak a state may be in comparison with its enemy, it must not forgo these last efforts, or one would conclude that its soul is dead. . . . A government that, after having lost a major battle, is only interested in letting its people go back to sleep in peace as soon as possible and, overwhelmed by feelings of failure and disappointment, lacks the courage and desire to put forth a final effort . . . shows that it did not deserve to win, and, possibly for that very reason, was unable to.[18]

Clausewitz, it goes without saying, did not envisage nuclear war. Yet, as can be seen here, he could envisage conditions under which the pursuit of politics gives way to something approaching **existential violence**, war not to advance or defend community interests, but to affirm or create communal identity. In 1812, when Prussia had to decide between an alliance with France or resistance against crushing odds, Clausewitz proposed that even total destruction would be better than capitulation, since courageous self-annihilation would sow the seeds for national rebirth later on.[19] At such moments, when the answer to the question 'How much do you want to bet?' becomes 'Everything', the normal categories of strategic and political analysis fall away. Ends and means cease to

interact, but converge to a single point; strategic plan, military 'decision', and political consequence all become one.

Whether the same is true in the realm of the very small—the warfare of guerrillas, partisans, and terrorists—is more difficult to say. These too are forms of **'people's war'**, in which traditional military methods often appear to be turned on their head, and the instruments of military violence slip the leash of professional control. And here indeed one must be careful, for our somewhat whimsical association of such conflicts with the realm of the very small in physics is not intended to revive the nineteenth-century conceit about 'small wars', as colonial conflicts of that era were often called. Such wars are in fact simply the **wars of the weak**, small in the scale of violence they employ, but not in the interests that may be at stake, nor in the passions that may be aroused.

The collapse of Europe's global hegemony between 1914 and 1945 created conditions in which **revolutionary and irregular warfare** gained new significance, and inspired an understandable pessimism among the practitioners of 'Newtonian' strategies based upon massive firepower, logistical abundance, spatial manœuvre, and decisive engagement, who now found themselves on the losing end of conflicts in which they seemed, at first glance, to enjoy every advantage. Yet it is not at all obvious that the underlying logic of ends and means, action and decision, cohesion and disruption, strategy and politics, is overturned by the choice of unconventional military methods. There is, moreover, no reason to believe that the new prominence of the revolutionary guerilla and terrorist will render organized armed forces on the 'Newtonian' model irrelevant. On the contrary: any political community capable of fielding such forces—including those established by revolutionary means—always does so. The *social costs* of people's war in all its forms are indeed unbearably high, and as we have seen, it is the perennial goal of strategy to keep those costs under control.

That the task remains difficult does not mean the effort is not worthwhile. In the first half-century of the nuclear era, at least, the only form of warfare that has been ruled out is nuclear war itself—a surprise, undoubtedly, but hardly unprecedented in that respect. Theory is always condemned to wrestle with a historical reality that has failed to conform to its expectations, or, indeed, to its forebodings. If the results in war are never final, as Clausewitz said, the same must be true for those who seek intellectual mastery over it.

## QUESTIONS

**1.** How do we know that war is not an end in itself?

**2.** How did Clausewitz's approach to strategy differ from that of Jomini? Which do you think would (or should) have more appeal to those called upon to wage war?

**3.** What is meant by 'command of the sea'? How do you know when you have it? By what means can it be achieved?

**4.** Every major advance in the destructiveness and lethality of armaments, from rifled weapons to atomic bombs, has been heralded by claims that new methods would make war more efficient and 'decisive'. Why does this conceit persist, in the face of overwhelming historical evidence to the contrary?

5. What are the distinctive characteristics of 'people's war', as compared to war conducted by regular armies? What special theoretical challenges does it pose?

6. Clausewitz declared that wars could be of two types: those fought for limited objectives, and those seeking to 'overthrow' the enemy. How might this distinction make itself felt in the conduct of military operations? Is it possible (or reasonable) to fight a 'total' war for 'limited' ends?

7. If a military officer has the opportunity to go to graduate school for a couple of years, what should he or she study?

8. If war is the 'pursuit of politics by other means', what is the proper role of political experts (i.e. civilians) in the formulation and execution of military strategy?

## ENDNOTES

1. Carl von Clausewitz, *On War*, edited and translated by Michael Howard and Peter Paret (Princeton, N.J.: Princeton University Press, 1976), pp. 87, 606–7.

2. Montecuccoli's important works are *Sulle battaglie* (*On Battle*), and *Tratto della Guerra* (*Treatise on War*) (1640–2); *Dell'arte militare* (*On the Art of War*) (1649–54); and *Della guerra col Turco in Ungheria* (*On the War against the Turks in Hungary*) (1670). Complete editions exist in French, German, and Italian, but not English. There is a brief selection in Gérard Chaliand (ed.), *The Art of War in World History* (Berkeley and London: University of California Press, 1994), pp. 566–9.

3. Montecuccoli defined war as 'the use of force or arms [*sic*] against a foreign people or prince' (*Tratto della Guerra*), in contrast to the violence a state might employ to control its own subjects, or which they might use against it. In this he was following the Dutch philosopher Justus Lipsius (*Politicorum libri six* [*Six Books of Politics*], 1589), and echoing his contemporary, Hugo Grotius (*De Jure Belli ac Pacis* [*The Law of Peace and War*], 1625), both of whom treat war as a sovereign act of the state.

4. Vauban's most important work was a compendium of three essays written in 1704–6, in English as *A Manual of Siegecraft and Fortification*, edited and translated by George A. Rothrock (Ann Arbor, Mich.: University of Michigan Press, 1968).

5. It is not by chance that the first flourishing of strategic rationalism was accompanied by a new literature on 'perpetual peace'. Examples are Abbé Charles Irénée Castel de Saint-Pierre, *Projet de paix perpétuelle* (*Project for a Perpetual Peace*) (Utrecht, 1713), and Jeremy Bentham, *A Plan for a Universal and Perpetual Peace* (London, 1789).

6. Memorandum on future operations in Italy (1794), in Felix Markham, *Napoleon* (New York: New American Library, 1963), p. 27.

7. Unfinished note included with the manuscript of *On War*, in Clausewitz, *On War*, p. 71.

8. Jomini was a prolific and highly repetitive writer. Among dozens of works, the most useful for a modern reader is his *Précis de l'art de la guerre* (*Summary of the Art of War*), 2 vols. (Paris, 1838; rev. edn., 1855). There is an abridged edition in English, *Jomini and his Summary of the Art of War: A Condensed Version*, edited by J. D. Hittle (Harrisburg, Penn.: Military Service Publishing Co., 1947).

9. *On War*, p. 89.

10. Not all misreadings of this famous passage can be explained by its rhetorical complexity. A recent example is Martin Van Creveld, *The Transformation of War* (New York: Free Press, 1991),

in which Clausewitz is represented as a proponent of 'Trinitarian war', that is, 'a war of state against state and army against army' (p. 49) from which the people are entirely excluded.

11. *On War*, p. 605. Clausewitz's characterization of war as a political instrument has often been misconstrued to mean that war is brought about by politics, but that once it has begun its unique requirements take precedence. This is not his meaning, as can be seen if the cited passage is presented in its full context:

> It is, of course, well known that the only source of war is politics—the intercourse of governments and peoples; but it is apt to be assumed that war suspends that intercourse and replaces it by a wholly different condition, ruled by no law but its own.
>
> We maintain, on the contrary, that war is simply a continuation of political intercourse, with the addition of other means. We deliberately use the phrase 'with the addition of other means' because we also want to make it clear that war in itself does not suspend political intercourse or change it into something entirely different. In essentials that intercourse continues, irrespective of the means it employs. The main lines along which military events progress, and to which they are restricted, are political lines that continue throughout the war into the subsequent peace.

12. See especially *On War*, pp. 119–21.

13. Ibid., p. 136; cf. the more extended discussion 'On Military Genius', pp. 100–12.

14. For Marx, see *The Communist Manifesto*, in Robert C. Tucker, ed., *The Marx–Engels Reader* (2nd edn., New York: Norton, 1978), p. 475; for Clausewitz, *On War*, p. 136.

15. Alfred Thayer Mahan, *The Influence of Seapower upon History, 1660–1783* (Boston: Little, Browne & Co., 1890).

16. Julian S. Corbett, *Some Principles of Maritime Strategy* (New York: Longmans, Green and Co., 1911).

17. *On War*, p. 593.

18. Ibid., p. 483.

19. 'Political Declaration', in Peter Paret and Daniel Moran (ed. and trans.), *Carl von Clausewitz: Historical and Political Writings* (Princeton: Princeton University Press, 1992), p. 290.

## REFERENCES AND GUIDE TO FURTHER READING

The indispensable introduction to the history of military thought is Peter Paret, (ed.), *Makers of Modern Strategy: From Machiavelli to the Nuclear Age*, 2nd. edn. (Princeton, N.J.: Princeton University Press, 1986). Hew Strachan, *European Armies and the Conduct of War* (London: Allen & Unwin, 1983), is a survey of modern military history that, while not explicitly concerned with theory, is thoroughly informed by it; likewise Michael Howard, *War in European History* (Oxford: Oxford University Press, 1976), a masterpiece of concision. Williamson Murray, MacGregor Knox, and Alvin Bernstein, (eds.), *The Making of Strategy: Rulers, States, and War* (Cambridge: Cambridge University Press, 1994), deals with national, rather than strictly military, strategies, but sheds much light on the latter.