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The Changing Character of War

Making Strategy in the Early Twenty-First Century

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Abstract:

Several fashionable fallacies affect current assessments of the character of conflict. It is always difficult to discern what changes will affect the strategic level, especially when attention is focused on particular wars and technological novelties. An honest appraisal of what is unchanging offers one route to that evaluation. Strategically, revisionist geopolitics, an electronic arms race between encryption and access, and a greater focus on protecting populations and national wealth are anticipated. After a period when the West could intervene across the globe at will, it appears that escalatory, existential threats are back, demanding a strategic solution.

There is no shortage of commentators on the current character of armed conflict. Each decade produces its seminal analyst, someone who seems to capture the zeitgeist with clarity. In such works, confident assertions carry the day. The appetite for concise and erudite answers, especially those that address the future as well as the present, means we readily consume certain commentaries and propagate them as the new truth. The

momentum of discourse can sometimes carry the idea well beyond the original author's exposition and intention.

The scholarship of strategic studies provides several examples of paradigm shifts that did not entirely live up to expectations. Basil Liddell Hart expounded a theory of indirect strategy in the 1930s that met a widespread desire among his generation to avoid the direct bludgeoning of the First World War.¹ Airpower theorists also offered a route out of the stalemated experience of that war, envisioning rapid operations in great depth that would compel civilian populations to sue for peace long before ground forces could achieve any great effect. After the Second World War, and facing the prospect of nuclear annihilation, new theories were offered to contain, limit and deter. Each one appealed to the preferences of their audiences, even when the options seemed limited to a 'delicate balance of terror'.²

The current age is not immune to creating an appealing solution in a time of uncertainty. In the 1990s, Mary Kaldor offered an interpretation of the character of conflict that seemed to satisfy a widespread desire to understand the post-Cold War international order.³ In her view, the superpower confrontation had been replaced with wars of identity, waged by new irregular actors who were responding to the effects of globalisation. She declared that the Clausewitzian paradigm of warfare, if it had not already been rendered redundant by the emergence of nuclear weapons, was finally dead. Contemporaneously with Kaldor, psychologist and linguist Steven Pinker argued that state-on-state wars, and indeed violence in general, were in decline.⁴ War, he suggested, was in terminal decay and heading for obsolescence. Those who had for years advocated the value of international institutions and the regulation of conflict were encouraged by such theses.

The historian E H Carr noted, in the 1960s, that it was very hard to conceive of the future, or indeed the past, when observers themselves are part of the flux of history and subject to all the assumptions and values of the present.⁵ So, after the optimism of the early 1990s, there was not only profound shock at the terrorist outrages of 9/11, there was also a confident assertion that 'the world had changed'. Now, it seemed, conflict would be dominated by terrorism, perhaps even involving weapons of mass destruction. Conventional armed forces suddenly seemed redundant, since the requirement was for intelligence, precise and limited strike, and special forces. Nevertheless, the Global War on Terror and the US-led Coalition intervention in Iraq in 2003 underscored the need for large numbers of forces to suppress insurgency, so many in fact that local auxiliaries were required. Analysts were soon focused on the difficulties of what General Sir Rupert Smith had called 'war amongst the people'.⁶ The new interpretation was that insurgency and counterinsurgency (COIN) would be the dominant form of war.

As the military operations in Iraq and Afghanistan were underway, some analysts claimed that COIN conflicts were not the paradigm shift that others had claimed they were, and disparagingly referred to them as 'coindinistas'.⁷ Indeed, there was a strong counter-current that advocated technological developments as the only truly new phenomenon worth considering. Technological-determinist interpretations of war are common. It is easy to refer to new developments in weapons as marking turning points in the conduct of war. All too often, however, technological failures are overlooked. Poison gas, while marking a new departure in 1915, was not used as extensively in subsequent wars as many had feared, not least because it was less effective than conventional weapons against troops with appropriate countermeasures.⁸ In another example, airpower, while influential, did not fulfil the expectations of the interwar analysts as a 'war-winning' weapon system. Here, one is

reminded of the fallacies of *Wunderwaffen* (Wonder Weapons) that the Nazi regime promised would turn the tide of the Second World War. Technologies confer certain advantages, and may even be essential to particular outcomes, but they do not, on their own, constitute a strategic solution.

Fallacies are a common problem in assessments of wars in the past, the present and the future. Such fallacies can be grouped into a number of categories. First, military officers are often accused of being unable to do much more than 'plan for the last war', the charge being that they obsess about how the last major conflict *should* have been fought and build organisations for its better execution. In fact, in conversations with military professionals, one is struck by quite the opposite. Officers seem very focused on new threats and changes taking place, however much they might hope that they did not. The problem is not that they do not think about the future carefully, but perhaps that they are too selective about the sort of war they wish to fight. Operational planning tends to be limited to what resources already exist, to what might seem politically tolerable to peacetime governments and to a linear progression towards success according to a predefined series of steps.

There is a widespread expectation that operations will commence with a preparatory phase ('phase 0'), perhaps a break-in or 'theatre entry' phase ('phase I'), a period of combat manoeuvre ('phase II'), and then military victory ('phase III') and a consolidation period ('phase IV'). Yet most wars, at least in the Western world in the past 100 years, have begun with a severe setback, a defeat or a profound shock. Conflicts in the past were invariably accompanied by mobilisation of national resources, escalation and elements of devastation. Wars did not progress in a linear fashion, but a dynamic one.

A second fallacy is the preference for particular paradigms, especially those that promise a decisive result. Writers, especially the authors of doctrine, refer to the panacea of 'revolutions in military affairs', 'shock and awe', 'full-spectrum dominance', 'information superiority', 'decisive battle' or the 'elimination of friction', to name just a few.⁹ Historical examples have shown that similar hopes for decisive fleet battles, air policing or strategic bombing failed to meet expectations.

A third fallacy is the tacticisation of strategy. Those who advocate the value of precision air strikes from standoff postures are describing a tactic, not a strategy. The degree to which such tactics represent a significant shift in the character of war is also problematic, since air and coastal interdiction operations are historic and not new. Worse, those who promote 'strategic raiding' as an answer to the problem of ground-holding or difficult land operations miss the point that raiding is a tactic, and is not necessarily strategic. Indeed, it might even be counterproductive to strategic goals.

In recent years there has been significant concern about hybrid warfare, although this too is a tactical concern, not a strategic one. The grouping of various ways and means to achieve outcomes in a particular battlespace, accompanied by a misinformation campaign, was a characteristic of blitzkrieg in the 1940s. Yet that approach was defeated by a combination of more adroit Allied strategy and operations. By 1945, blitzkrieg held less 's significance and amounted to a lot less than initially appeared against weak Western Allied armies in its early shocking form in 1939–40 against weak Western armies. Concerns about hybrid warfare actually reflect an anxiety about NATO's weakness relative to the 1980s and the shock of having its own tactics used against it. The related concern that Russia is able to orchestrate an effective strategic narrative – and that the West urgently needs to craft its

own narratives – reflects a deficit in confidence about the values of the Western world: The exercise of free speech; the refusal to accept that any person, in whatever high office, can be above the law; the protection of the citizen from arbitrary imprisonment; the right to be represented through parliamentary democracy; equality in opportunity; and the freedom of conscience, to name just a few of our most fundamental principles. The search for the next ‘big idea’ obscures the deeper and more profound essence that these ideas have made liberal democracy a success. There is a danger that an obsession with the novelty of the ‘medium’ can obscure the ‘message’. It seems strikingly appropriate that ‘Twitter’ has the name that it does.

A fourth fallacy is that of preference for types of war. Political leaders, the public and many military professionals in the Western world are unwilling to face the possibility of very severe setbacks or large-scale scenarios, such as major war. Western governments only resource definite and limited-war options. If challenged, the response is invariably that the West will not engage in land operations on a large scale and will limit itself to air–sea operations, as if somehow it has the choice. Enemies may also choose where to fight the West, and situations and circumstances will determine what scale of conflict develops. It is true to say, to use the phrase attributed to Leon Trotsky, ‘you may not be interested in dialectics [that produce war], but dialectics are certainly interested in you’.¹⁰ The West cannot choose its wars. To many revisionist peoples and states, observing the fattened and complacent European continent with its hopelessly inadequate decision-making processes, it is just a matter of time, resources and opportunity. These fallacies have significant implications for the making of strategy and policy.

One can be more certain about the unchanging nature of war. There are five well-known essential elements which impinge upon the making and execution of strategy: politics; the human dimension; the dynamics of interaction; diversity; and friction.¹¹

The political element defines the notion of national interests and the pursuit of certain ends, but war outlines more sharply the role of coercion and force in that endeavour. Sir Julian Corbett, the naval historian and strategist, noted that politics, particularly domestic demands, always deflected 'pure' strategy.¹² Moreover, the need to consider international institutions and conventions, allies, coalition partners and neutral parties can create entirely different strategic requirements. Even when the character of war changes the fundamental element of politics will always remain paramount. It will define the drivers and objectives during conflict and all post-war considerations. It can limit and constrain, but just as easily escalate, demands.

This leads to the second element: the human dimension. Notwithstanding the prevalence of the assumption that new technologies will dominate future conflict, war remains a fundamentally human activity. Its lethality, visceral investment, judgement of risk and psychology all exist beyond the realm of algorithms and digital calculus. War is driven by fear, status and defined interests, by the instinct for survival, a desire to eliminate uncertainty and by bellicose culture. It is the product of perceived injustice, the reaction to an incursion or threat, and the gamble of opportunism. It can be the result of prejudice, misunderstanding or ruthless calculation. In war, the belligerents seek to subdue, break or deter the adversary. Regardless of the constraints imposed by international law, by the opprobrium of other nations or the condemnation of more moral minds, these basic

attributes continue to surface in war. To ignore these realities suggests an ideologically inspired naivety.

War is the result of dynamic interactions, and these distort and change the original intent of any strategic planners. War, Clausewitz insisted, is 'not an isolated act', but 'a series of blows', a 'duel' and a struggle.¹³ The desire by its participants to seek out advantages and to win creates a dynamic of adaptation, escalation and manoeuvre. The escalatory logic of war, even when there are 'periods of inaction', demands constant reassessment of horizons and milestones, cost-benefit analyses and options.¹⁴ Interests must be recalibrated against means and the 'rational calculus', to align ends, ways and means, is thus never a single event. War is not just the extension of politics with other means; war changes politics.¹⁵ In essence, war transforms.

Diversity is in the nature of war. The character of conflict changes with every encounter as adversaries seek advantage, introduce alternative ways and develop new means. Geography, cultures and relative strengths will also impinge upon strategy and war. A variety of ways and means are invariably open to belligerents, and weaker actors will be forced to seek the full range of strategic options which stronger powers may need not concern themselves with. It is for this reason that, in the most asymmetrical conflicts, the weaker side may discover a valuable operational advantage or avenue to strategic success, despite tactical or operational defeat. Strategic planners should heed Clausewitz's warning to first discern 'the type of war that you are in' and not try to turn it to something that is 'alien to its nature'.¹⁶ Just hoping that one's ways and means are the right ones, perhaps because of pre-war financial reasons, is insufficient, and, given the risk it creates to the lives of service personnel, it is quite possibly immoral.

There must be a ruthless assessment of what is appropriate to achieve the ends and to prevent the enemy from achieving its objectives. In the event of less intense, low-tempo operations, certain high-intensity means could prove counterproductive. Moreover, the changes that take place during a conflict will also require a recalibration of effort, ways and means.

From the baseline of the unchanging nature of war and measured against historical experience, strategic analysts and planners have a better chance of assessing what is genuinely new and the relative speed, depth and extent of change that they face.

The first area assessed to be a fresh challenge is technology. There is no doubt that new surveillance tools, precision-guided munitions, remotely operated air systems and automation are all making a significant impact on operations and tactics. The extent to which they affect strategy is less clear, but strategy can certainly be affected by changes wrought by operational realities. A tactical success or setback can, under certain circumstances, change an operational situation and set in motion a strategic breakthrough or collapse. The epitome of this condition was the 'decisive battle', a phenomenon much studied and lauded by historians and military and naval professionals of the past, even though, in reality, truly decisive battles were extremely rare compared with the majority of interactions and engagements that characterised wars and confrontations in history.¹⁷

Much is currently being written on the phenomenon of information in war.¹⁸ Cyber is a concern for many states and citizens because it appears to combine surveillance, espionage and sabotage. The question, from a strategic point of view, is to ascertain whether sabotage and espionage can have a strategic effect. The historical record would suggest that intelligence can indeed have an effect out of all proportion to the effort. The

impact of secret decryption of enemy codes in the Second World War is a case in point. By contrast, sabotage, even against strategic nodes in the same conflict, was less significant in relative terms. Partisan sabotage and other forms of raiding could tie down strategic resources, but it is harder to find examples of outright significant strategic effect.

Other aspects of information operations are not new. Information has been used to mobilise populations, to demoralise an adversary, and to encourage allies and neutrals; it has been used to recruit, to articulate a cause and to reinvigorate conviction after serious setbacks. Some of the most powerful and memorable examples of information warfare, 'agitprop' and propaganda have occurred when nations and peoples faced severe adversity. The French at Verdun in 1916 inspired their nation with the injunction 'ils ne passeront pas!'; the Soviets created an all-encompassing ideology of defence as an anti-Fascist 'people's war' in 1943–45; and Churchill appealed to a certain bloody-minded resilience in the British public in 1940 when he demanded total resistance to Nazism and offered nothing but 'blood, tears, toil and sweat'.

Today, the anxiety is that there is greater oscillation in public sentiment (driven by social media and internet access), that information must be delivered to a wider and more diverse audience rather than a clearly defined, national one, and that 'information operation thresholds' (where the public tolerance of military action is exhausted resulting in calls for operations to cease) are being lowered, at least in the Western world. This appears to have occurred precisely when enemies of the West, such as Daesh (also known as the Islamic State of Iraq and Syria, ISIS), committed ever more barbarous atrocities with apparent impunity. For the West, there appear to be discernible limits that are driven by accidental civilian casualties, euphemistically or perhaps cynically entitled 'collateral

damage', by episodes of indiscipline by Western troops, and by local insurgency or terrorism.

Every conflict in which Western countries are involved will spawn an anti-war protest. Even when the cause is clear, it is depressingly predictable that the groups Lenin once labelled 'useful idiots' will appear in the media and on the streets to condemn their own government, claim that their country's actions are 'not in my name' and conflate all war with a specific conflict. The UK's Stop the War coalition was widely criticised in 2015–16 for condemning Western air operations against Daesh and Al'Qa'eda, which have pledged to destroy the West, while remaining silent about Russian air strikes on aid convoys in Syria, Russian military intervention in Ukraine, the shooting down of civilian airliner MH17, or widespread Syrian military atrocities, including the use of chemical weapons against civilians. The laudable opposition to war, shared by many Western peoples, is apparently the manifestation of a post-military society, although it is also noteworthy that, in the West, there is still an appetite for humanitarian intervention, and a willingness to endure the conditions and casualties of war when required.¹⁹

The absence of an existential war means that peacetime freedom of speech remains the standard for the critique of conflict, and the selectiveness of opinion through traditional and new media is understandable. What is less comforting to those trying to explain a case for more coercive or even military action is that the popular trend is for even greater faith in selected narratives, unrepresentative or unverifiable news outlets, and the artificial world of comforting ideological tropes. The current nomenclature for this includes 'fake news' and 'alternative facts', although in Russia the government appears to be unconcerned about concealing its fabricated narratives. The defining struggle of the twenty-first century in

developed countries will be between the real and the unreal, the authentic and the synthetic. Millions already opt for the sources and standards that reflect their own prejudices, but new technologies and systems appear to be enhancing the filtering process. The responses of governments and professional military services have been rather slow and reluctant. What is called 'strategic communications' is often little more than a communiqué and is certainly not executed in a strategic way.

The adherence to the idea of 'narratives' betrays a lingering hope that a single line of argument will suffice in a more sceptical, diverse and critical information space. The gap between the official line of government and the doubting public is the product, again, of the absence of an existential war, where information is contested in a peacetime environment. Yet, the alleged value of multiple messaging, ambiguity and denial, practised by Russia during the Ukraine conflict in 2014, confers only a short-term advantage. The contradictions of Russian information operations have sacrificed credibility in the longer term. The West would be far better off pursuing, through anticipation, foresight and preparation, a faster and fragmentary approach to information operations rather than an adherence to particular 'narratives' delivered in a ponderous fashion. Even then, it should discern which messages are of strategic value, and which ones are of an ephemeral 'newsworthy' stamp.

Strategic thinkers have also been able to identify another shift in the underlying conditions of conflict, namely in the importance of geopolitics. The challenges to US and, by extension, Western hegemony have been emerging for several decades. This rivalry does not, of course, mean the automatic 'decline' of Western power. Indeed, short of major war, such an eventuality seems unlikely. The Western world is still dominant in global economics, in military spending and in actual military power. Nonetheless, historical examples indicate

that conflicts are more likely to accompany challenges to a dominant power and these are invariably found along the boundaries or limits of that power. During the Cold War, for example, wars broke out at the interface of superpower control or influence. Proxy conflicts and the decomposition or reformation of states are likely to determine the conflict regions in the twenty-first century.

International institutions have been the guiding element in the prevention, limitation or conclusion of war, while international law has provided a framework to limit the excesses of the conduct of war, and the mechanism to hold to account those that have breached *jus in bello* or *jus cogens*. Although there was agreement and consensus after 1945 between states that constituted the United Nations and which represented the majority of the globe, in essence the international legal system was constructed in the West and so were many if not all non-legally binding international norms. When added to the structure of the global economy, which has tended to benefit Western states, it is easy to see how revisionist powers would seek to ignore or alter international law for their own ends. National interests have often collided with international priorities and there are many cases where the UN has been sidelined or defied.²⁰

China, for example, does not adhere to the UN Convention on the Law of the Sea and pursues its own claims to territories in the East and South China Seas. Russia stands in open defiance of UN views on sovereignty, as amply demonstrated by its illegal annexation of Crimea and military intervention in Ukraine. The US has been accused of ignoring the UN prohibition on 'regime change' in its pursuit of former Iraqi president, Saddam Hussein, and technically breached the sovereignty of Pakistan with its raid to kill Osama bin Laden in 2010. The UN itself has inadvertently set in motion breaches of existing norms on

sovereignty with its advocacy of the idea of Responsibility to Protect in that it erodes the notion that states should not intervene in the internal matters of other states. So while there is little doubt that the UN and other international institutions, for all their faults and weaknesses, will continue to be the forum for the resolution of conflicts, it seems more likely that some states will seek to ignore, overturn or flagrantly defy international bodies altogether.

Unilateralism and bilateralism may be a much more common feature of the twenty-first century, even where notions of collective security continue. There is a strong chance that new technologies will make existing authority harder to enforce. Cyber systems, which combine and enable espionage, communications and sabotage, offer the opportunity for deniability and concealment against attribution. Even where new forms of big data, systems of systems and the internet of things make stealth more difficult, the arms race of encryption and decryption is set to accelerate. Yet, although the emphasis of cyber literature is on the sabotage it threatens, or the possibilities of communication and connection, it is in the realm of intelligence and espionage that the greatest strategic effect is always achieved.²¹ Moreover, while debates about cyber and artificial intelligence tend to focus on the degree to which human decision-makers will be replaced, it seems clear that decisions will still be made by some humans. Some will be operational; others will be strategic. The utility of war will be questioned, not least on the grounds of who benefits and what conduct is deemed acceptable in the pursuit of national interests. Strategic planners will still be required to decide on perennial problems such as how one can convert operational success into strategic advantage, or even the fulfilment of strategic ends. A survey of history reveals that technology did not provide all the results required, and that the fundamentals in the design and conduct of war were unchanged.

Similar problems have emerged throughout history. Decision-makers of the past faced an uncertain future, emerging threats, a shifting geostrategic balance and domestic pressures too. At times, in the past, our forebears were distracted by tactical events, focused on trends that turned out to be nothing of the sort, and imagined exaggerated future threats and promising technologies. In making assessments of the future, it is tempting to observe trends and extrapolate judgements with certainty, but these are still the product of subjective preferences. Urbanisation, population growth and greater use of information technology seem unassailable unless one starts to consider truly catastrophic options. Moreover, many trends are seen in isolation. Cures for certain diseases and similar scientific breakthroughs in health are regarded today as benign, but may appear philosophically problematic to future societies overburdened with massive, unproductive populations. Scientific breakthroughs may become redundant to systems that lack the fundamental resources to power and fulfil them.

Values that prevail in societies will change in the next 100 years as certainly as the changes that occurred in previous centuries. Standards and behaviours considered normal today will be judged differently in just 50 years from now. Some of these will be related to war. It is not inconceivable to imagine a situation where, having lost tens of thousands of citizens to a succession of mass contamination events and detonations of a new generation of conventional explosives that have rendered nuclear weapons obsolete, a population would refuse to offer quarter to either able-bodied or incapacitated enemy combatants or their supporting civilians. Today such a scenario appears unthinkable, offensive even, but it has a historical precedent in, for example, the retaliatory imperative of strategic air bombing campaigns in the Second World War.

The strategic implications of these conceptual possibilities are that the security of populations and attacks on domestic infrastructure are much more likely. The further implication is that wars are more likely to involve the protection and therefore the passions of the people, to escalate beyond the capacity of governments to limit them and to take on a more existential quality than the conflicts of the early twenty-first century.

Making strategy requires a determination to avoid the assumptions of present-mindedness or at the very least use an analytical framework to mitigate their effects. The starting point of that process is to comprehend more thoroughly the significance of the changes taking place, but also the continuities. Some new developments, such as shifts in geopolitical and economic power, are truly strategic. Others, such as technological enhancements and novel weapon systems, are not. The escalatory nature of war means that the comparative advantage of a single system or technique will not endure as such for very long. Knowing how to calibrate for strategic success is even harder to discern. Ultimately it is still a question of allocating resources, selecting a number of appropriate ways and offering a clear and unifying purpose. It is a process where one's gaze is frequently lifted to the horizon. One can only hope that current generations can elevate themselves above the distractions and noise of current affairs and the latest gadgetry, and instead focus on the genuinely strategic.

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Notes

¹ B H Liddell Hart, *Strategy: The Indirect Approach* (London: Faber and Faber, 1941; 2nd edition., New York, NY: Praeger, 1967).

² Jeremy Black, *Air Power: A Global History* (London: Rowman and Littlefield, 2016); Lawrence Freedman, *Deterrence* (London: Polity, 2004); Adam B Lowther (ed.), *Deterrence: Rising Powers, Rogue Regimes, and Terrorism in the Twenty-First Century* (New York, NY: Palgrave, 2012); Tanya Ogilvie-White (ed.), *On Nuclear Deterrence: The Correspondence of Sir Michael Quinlan* (London: Routledge, 2012); Christopher Bertram, *The Future of Strategic Deterrence* (Hamden, CT: Archon, 1981); Frank C Zagare, *The Dynamics of Deterrence* (Chicago, IL: University of Chicago Press, 1987); Keith B Payne (ed.), *Understanding Deterrence* (London: Routledge, 2013); John J Mearsheimer, *Conventional Deterrence* (New York, NY: Cornell University Press, 1983).

³ Mary Kaldor, *New and Old Wars: Organised Violence in a Global Era* (Stanford, CA: Stanford University Press, 1999); Stathis N Kalyvas, "'New' and 'Old' Civil Wars: A Valid Distinction?", *World Politics* (Vol. 54, No. 1, October 2001), pp. 99–100.

⁴ Steven Pinker, *The Better Angels of Our Nature: A History of Violence and Humanity* (London: Penguin, 2012).

⁵ Carr was citing Hegel. See G Barraclough, *History in The Changing World* (Oxford: Blackwell, 1955).

⁶ Rupert Smith, *The Utility of Force: The Art of War in the Modern World* (London: Penguin, 2006).

⁷ Douglas Porch, *Counterinsurgency: Exposing the Myths of the New Way of War* (Cambridge: Cambridge University Press, 2013).

⁸ Brett Holman, 'The Air Panic of 1935: British Press Opinion between Disarmament and Rearmament', *Journal of Contemporary History*, Vol. 46, No. 2 (April 2011), pp. 288–307.

⁹ See, for example, Elinor C Sloan, *The Revolution in Military Affairs: Implications for Canada and NATO* (Montreal: McGill-Queen's University Press, 2002); William A Owens, 'The Emerging U.S. System-of-Systems', *Strategic Forum* (No. 63, February 1996); William H J Manthorpe, Jr., 'The Emerging Joint System of Systems: A Systems Engineering Challenge and Opportunity for APL', *Johns Hopkins APL Technical Digest* (Vol. 17, No. 3, 1996), pp. 305–10.

¹⁰ Leon Trotsky, 'Three Conceptions of the Russian Revolution', 1939. It is not clear that Trotsky's original quotation refers to war. This translation of 'war' from the original text was proposed by a number of translators who interpreted dialectics as the mechanism for class war.

¹¹ Carl von Clausewitz, *On War*, Book One: On the Nature of War, 'On Danger in War', Chap. IV, translated and edited by Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976).

¹² Julian Corbett, 'The Teaching of Naval and Military History', address to the Historical Association, 7 January 1916, *History* (Vol. 1, No. 1, April 1916), pp. 17–18; Corbett Papers, box 6, National Maritime Museum. For a full explanation of Corbett's significance, see Andrew Lambert, *21st Century Corbett* (Naval Institute Press, 2017).

¹³ Clausewitz, *On War*, Book One, Chap. I, p. 2.

¹⁴ *Ibid.*, pp. 14, 17.

¹⁵ Hew Strachan, *The Direction of War: Contemporary Strategy in Historical Perspective* (Cambridge University Press, 2013).

¹⁶ Carl von Clausewitz, *On War*, Book One, [Paret and Howard edition], p. 88.

¹⁷ Jeremy Black, *Rethinking Military History* (London: Routledge, 2004); J F C Fuller, *Decisive Battles of the Western World and Their Influence upon History. Vols 1–3*, (London: Cassell, 2001).

¹⁸ P W Singer and Allan Friedman, *Cybersecurity and Cyberwar* (New York, NY: Oxford University Press, 2014); Jason Andress and Steve Winterfeld, *Cyber Warfare: Techniques, Tactics and Tools for Security Practitioners* (Waltham, MA: Syngress, 2013); Richard Stiennon, *Surviving Cyberwar* (Lanham, MD: Government Institutes, 2010); Gregory J Rattray, *Strategic Warfare in Cyberspace* (Cambridge, MA: MIT Press, 2001); Leigh Armistead (ed.), *Information Operations: Warfare and the Hard Reality of Soft Power* (New York: Potomac, 2004).

¹⁹ The majority of UK residents polled between 2001 and 2009 were in favour of military operations in Afghanistan, for example, although, according to the BBC, the mood changed in 2009–10. See *BBC History*, 'Public Opinion about the Afghan War Changes',

<http://www.bbc.co.uk/history/events/public_opinion_about_the_afghan_war_changes>, accessed 1 February 2017. The UK public resilience was nevertheless encapsulated in the repeated turnout of the residents of Royal Wootton Bassett to honour repatriated war dead.

²⁰ Steven Metz and Phillip Cuccia, *Defining War for the 21st Century*, 2010 Strategic Studies Institute Annual Strategy Conference Report (Carlisle, PA: US Army War College, 2011), p. 15.

²¹ Contrast the deduction of P W Singer, *Ghost Fleet* (New York, NY: Houghton Mifflin Harcourt, 2016) with Robert R Leonhard, *The Principles of War for the Information Age* (New York, NY: Presidio Press, 2000), or the historical experience of Bletchley Park in Michael Smith, *Secrets of Station X: How the Bletchley Park Codebreakers Helped Win the War* (London: Biteback, 2011).