JOHN ANDREAS OLSEN
(ed.)

On New Wars

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ABSTRACT

On New Wars seeks to answer what is "new" about new wars and military theory by linking the present and speculation about the future of war with historical awareness. The past may be an imperfect guide to the future, but we have to make the most out of it because it is the only reliable compass that we have.

The book is divided into three parts, with three chapters each. The first part provides a conceptual framework for thinking about new wars, the second examines characteristics and commonalities and the final part looks at the validity of some of the military concepts that dominate current literature, especially effects based operations and fourth generation warfare.

One central argument is that wars are ever-changing – the combination of who fights whom, when, where and why will always be unique – but although the ends, ways and means may vary over time, it is first and foremost the character of war that changes, not the nature of war itself – war remains, as Carl von Clausewitz reminds us, "a permanent feature of the human condition."

CONTENT

INTRODUCTION: WAR RECONSIDERED

by John Andreas Olsen

This anthology seeks to answer what is "new" about new wars by linking current trends with speculations about future ones, all the while mindful of the historical context. Although the past may be an imperfect guide to the future, it remains the only reliable compass for predicting future developments and must be utilized as fully as possible.

After 1648 there was a very deliberate attempt within Europe to observe restraint; the Westphalian state system was in large measure crafted to ensure a self-control that would prevent the Thirty Years' War from repeating itself. In the course of the nineteenth century, while cabinet warfare was still in place, the state acquired capabilities in terms of demographic and industrial capabilities and resources that made possible total war in a way that the Westphalian system had deliberately eschewed. This form of warfare manifested itself in the two World Wars of the twentieth century and led to the ruination of most of the parties. The Cold War was a period when restraint most definitely was in place but even during this period there was the search for other forms of warfare, most obviously limited war on the part of the United States and revolutionary guerrilla warfare on the part of communists and anti-imperialist factions. Wars in the post-Cold War era have in turn their own trends: interstate wars are increasingly being replaced by intrastate wars in the form of insurgencies, revolts and ethnic cleansing, and trans-state wars in the form of terrorism on a global scale.

The paradigm of big interstate wars, *la grande guerre* and *levée en masse*, has passed from the stage, at least for the moment: Wars from the time of Napoleon to the Second World War are very different from the wars that are currently being fought in Afghanistan and Iraq. However, in recognising this shift of paradigms, we also need to appreciate that big interstate wars were always the exception: historians may have been more interested in big wars but history is replete with smaller wars that had plenty of human suffering. There is indeed a considerable gap between what has been considered militarily relevant over time, and what military forces have actually been doing. For example, the British Empire witnessed seventy-four military campaigns under the reign of Queen Victoria (1837–1901), but only two – the Crimean War and the first part of the Boer War – were recorded as conventional wars in the traditional meaning of the term. Most colonial wars were not considered proper soldiering, but the reality was that the soldiers were engaged in fighting that was just as deadly and destructive. Thus, in our search to find out what is new about new wars, we need to account for changes in the rhetoric as well as changes in the actual conduct of war.

The authors of this book have been selected for their critical and constructive approach to the concept of war, and all have the required historical awareness mentioned in the opening paragraph. The book has been divided into three parts, each with three chapters. The first part provides a conceptual framework for thinking about new wars, while the second examines characteristics and communalities. The final part looks at the validity of some of the military concepts that dominate current literature, especially effects based operations and *fourth generation warfare*.

Chapter I: Professor Hew Strachan argues that strategy is the interface between political objectives (ends) and operational capabilities (means), and is built on an appreciation of the nature of war itself. He suggests that "the global war on terror" is seriously flawed, because it is presented as a statement of strategy when it is really a statement of policy: the statement lacks the central ingredients of any plausible strategy, especially clear definitions of space, time and forces. This lack of strategy, in turn, may result in the defeat of coalition forces in Iraq and Afghanistan. Strachan argues that strategy has collapsed as a tool for shaping an understanding of war, because "we live with the intellectual legacy of the Cold War more than we recognise," while the West has become ever more ready to use war as an instrument of policy. Strachan suggests that the challenge is conceptual as well as institutional: we must first come to grips with the realm of strategy, the nature of war and the notion of policy, in part by revisiting the works of Clausewitz and other conceptual thinkers, while we establish a dialogue between top military commanders and politicians, a discourse that used to be a given in various forms of war cabinets.

Chapter 2: Sir Rupert Smith argues that we have witnessed a radical shift in the paradigm of war: from the *industrial war* (thesis) and *revolutionary war* (anti-thesis) to *war amongst the people* (synthesis). The industrial war is characterised by a state's conscription, mobilisation, defence industrial complex and a predefined command and control apparatus, in which the state operates in a cycle of peace-crisis-war-resolution-peace. Smith argues that our military, political and policy officials are still organised in institutions and still thinking in terms of industrial war, a paradigm that was no longer viable after 1945. The new paradigm, war amongst the people, is characterised by an ebb and flow between confrontations and conflicts. The objectives for military forces are no longer "take, hold, destroy, defeat", but, for example, "create a safe and secure environment" – the very concept of military victory has changed. Smith suggests that the new paradigm has six trends and that the single most important thing to change is the way we think about the use of military force. Thus, the greatest challenge is conceptual and intellectual, not technological or material. Smith also suggests what the new paradigm means for the profession of arms: leaders who have the intellect and aptitude to innovate rather than merely implement;

junior officers who are creative and imaginative; fewer "levels of command" in the command and control structure; and the recognition of information, not firepower, as the currency of war amongst the people.

Chapter 3: Major Harald Høiback takes a close look at epistemological challenges by analysing two different strands of military theory-making. Having presented the founding fathers of modern military thought he examines the "Jominian lineage" of military theory, which emphasises eternal principles of war, and the "Clausewitzian lineage," which pays less attention to rules and principles and instead emphasises the commander's personality and character. The Jominian school of thought is often associated with "how to act", and the Clausewitzian with "how to think", and thus they are often presented as rivals whose lineages are mutually exclusive. Høiback, in contrast, provides the case for how we are better off combining these two strands: first by realising that Jomini wrote for people without much experience of war, while Clausewitz wrote for the genuine expert; second by realising that there are different requirements for the tactical and strategic levels of war; and finally by looking into the relationship between the context of discovery, the context of justification and the context of use. Høiback suggests that an improved understanding of military theory is useful for military practitioners, but possibly even more important for a constructive dialogue between generals and politicians.

Chapter 4: Professor Herfried Münkler contends that there are three features that characterise new wars: the gradual *privatisation* of war (states no longer have monopoly of war), the increasingly *asymmetricalisation* of war and *de-militarisation* of war (regular armed forces have lost monopoly of war). Münkler examines these developments, emphasising that all three features have presented themselves over time in different shapes and forms, but it is the fact that they occur at the same time that makes for wars made new. The grammar of war has changed in fundamental ways: current warfare follows different rules than it used to in the past. Münkler makes his case by submitting that a model of war should be a blueprint for assessing the creativity, rationality and legitimacy of strategic actions undertaken by different actors of violence. Towards the end of the chapter, Münkler suggests that there are three types of war that will play a decisive role in the new century's regimes of violence: resource wars (military control over national resources), wars of pacification (guarantee non-proliferation) and internecine war (poor versus rich).

Chapter 5: Professor Christopher Coker, arguing that the world is becoming ever more complex, and thus so is the phenomenon of war, looks into the future of war. The dominating feature is no longer the relationship between offence and defence, or the state's military capabilities, but security. Furthermore, increased complexity also means that war has become increasingly indecisive – the crushing tactical victory on the battlefield which leads to a potentially

unwinnable insurgency campaign is no success at all. States may be relatively safe from attacks by other states, at least in the Western world, but their citizens are not. Unconditional military victory is as such an outmoded concept in the War on Terror, as war is increasingly becoming a zero-sum game. Coker insists that war in the 20th century was characterised by defence addressed to threats, while war in the 21st century is better characterised as security addressed to risk. In other words, the mass conscript forces of the era of war as defence have given way to expeditionary forces in the era of war as security. Consequently armed forces are being restructured to deal with risk management. The paradoxical development limits the usefulness of war, since security is first and foremost a local matter, and war is an imperfect instrument for such micro-management.

Chapter 6: Professor Mats Berdal argues that a striking feature of the post-Cold War era has been the widespread practice of outside intervention undertaken with the express aim of "building sustainable peace" in societies ravaged by war. He suggests that such "post-conflict" intervention has assumed a variety of shapes and forms, but taken as a whole, the level of ambition exhibited by the international community in its peace-building activities over the past fifteen years is unprecedented, involving, in many cases, nothing less than a commitment to reengineer and reshape societies by means of external presence. Drawing on the experience of operations from Bosnia to Iraq, Berdal reflects on the record of peace-building intervention over this period from three perspectives. First, he assesses the concept of "post-conflict peace-building" as it appears in the literature and as it is commonly conceived by governments and international organisations. Second, he identifies some of the key contextual categories that help define post-war settings and operational environments, including their distinctive political, historical, security and economic aspects. Finally, he focuses on three fundamental priorities for outside armed forces in the immediate aftermath of conflict: providing security, stabilising governing structures and addressing basic, life-supporting needs.

Chapter 7: Dr Alan Stephens suggests that there is a common flaw of logic in strategic studies: existing or emerging capabilities shape concepts rather than the other way around. To get the order right again he makes the case for effects based operations (EBO) as a strategic philosophy that will achieve four broad effects: a strategic effect, a theatre-level effect, a domestic security effect and a peace operations effect. Stephens emphasises the relationship between the ends-ways-means nexus as fundamental to formulating an EBO philosophy; he also makes the case for EBO being translated into a methodology for planning and warfighting for all military services, as well as non-military agencies. Making EBO a practical model requires first an understanding of an opponent's culture, society, governance and economy, and second an appreciation of the fact that any immediate effect will generate unforeseen and often unintended

second- and third-order effects. Both requirements are closely linked to decision makers being able to think in terms of context rather than destruction and kills. Nevertheless, Stephens stresses that the challenges associated with a successful implementation of EBO within advanced forces is neither intellectual nor technological, but cultural and organisational, because emotionally the Western military remains three separate services.

Chapter 8: Dr Antulio J. Echevarria II argues that military theory has no future because current attempts do not stand scrutiny when it comes to method of verification. First he offers a methodology for verifying the validity of military theory by returning to Clausewitz, who employed three steps in examining concepts and principles: the logical (the theory's logic); the material (the theory's evidentiary support); then placing the concept within an established hierarchy of other known concepts (holistic assessment). Second, by arguing that military theories need to go through these steps to prove themselves, Echevarria tests the notion of fourth generation War (4GW) and demonstrates that it fails on all three counts to qualify as a military theory. In the third part he argues that one consequence of the lack of sound theories is the Western world's confusion of "a way of war" with "a way of battle," as evidenced by the twelve acclaimed principles of war, which are merely principles of battle, if principles at all. Echevarria concludes that it is crucial for our military profession to be able to develop military theories, which can stand up to something similar to the Clausewitzian verification process, because theory inevitably becomes the foundation for doctrine, and thus affects practice.

Chapter 9: Dr Frans Osinga offers an explanation of 4GW as an exercise in strategic thinking. The chapter follows a building block approach, with each block approaching 4GW from a different perspective that, combined, offers a synthesis of the various ideas and arguments that have found their place in the 4GW concept. An introductory section on the nature of strategic theory illustrates the difficulties associated with the phenomenon, and it argues that strategic theory should not be held up to the standards of physical science. Osinga next positions 4GW as an idea in which its authors aim to connect certain developments that, in their view, will dominate the future strategic landscape. This is followed by a discussion of 4GW's connection with other and similar recent studies into future war. The next lens through which 4GW is approached is the strategic thought of John Boyd, to which 4GW authors often refer. Taking the reader beyond the familiar but limited view of the "rapid OODA loop" idea that Boyd is often associated with, the discussion sheds light on the strategic logic of 4GW – the logic of moral war. Against this background, the fourth section presents some of the key arguments of the prime authors of 4GW papers, while the last chapter is a summary of critiques. Osinga concludes that 4GW may be akin to a string theory of contemporary strategic studies.

A central argument in this book is that wars are ever changing – the combination of who fights whom, when, where and why will always be unique – but although the ends, ways and means may vary over time, it is first and foremost the grammar of war (the character of war) that changes, not the nature of war itself – war remains, as Carl von Clausewitz reminds us, "a permanent feature of the human condition."

Part I: Conceptual Framework

WAR AND STRATEGY

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by Hew Strachan

The armed forces of the Western world, and particularly those of the United States and the United Kingdom, are today involved in waging a war for major objectives – or so at least the rhetoric of that war's principal advocates, George Bush and Tony Blair, would have us believe. It is a war to establish the values of the free world – democracy, religious toleration and liberalism – across the rest of the globe. In his speech to mark the fifth anniversary of the attacks of 11 September 2006, President Bush, showing a prescience denied to the rest of us, declared that it is "the decisive ideological struggle of the twenty-first century. It is a struggle for civilisation." The war may have its principal focus in the Middle East and Central Asia, but it is also being waged within Europe, with supporting evidence provided by the bomb attacks in Madrid and London.

　　Bush and Blair have called this war "the global war on terror". In February 2006 US Central Command, based at Tampa in Florida but with responsibilities which span the Middle East and south-west Asia, recognised the conceptual difficulties posed by the "global war on terror" and rebranded it the "long war". Both titles treat the current conflicts in Iraq and Afghanistan as subordinate elements of the grand design. Moreover, the design is so grand that it is one onto which other conflicts can be grafted, even when the United States is not a direct participant. The Prime Minister of Australia, John Howard, used his country's peace-keeping commitments in East Timor, and his wider concerns about Indonesia more generally, to sign up to the War on Terror (with some reason). In 2006, Israel presented its actions against the Hizbollah in Lebanon as part of the same greater struggle (with rather less).

　　"The global war on terror" is a statement of policy; it is not a statement of strategy. The coalition forces in both Iraq and (less so) Afghanistan find themselves overcommitted and confronting the possibility of defeat. One of the reasons that they are in this situation is that they lack a strategy. The fact that so many parties are ready to use the word strategy seems to suggest they also understand what strategy is. But they do not. At the beginning of the nineteenth century, Clausewitz defined strategy as the use of the battle for the purposes of the war. To him, and just about everybody else in Europe until 1918, strategy

was the art of the commander. Today strategy is too often employed simply as a synonym for policy. Bush and Blair say they have strategies when they do not. They have policies, idealised visions of a post-war order, which are not linked to regional realities or military capabilities. The circumstances prevailing in Iraq are different from those in Afghanistan, and they in turn are unlike those on the borders of Israel and in Indonesia. What gives each of these conflicts homogeneity is less their underlying natures than the "war on terror" itself, a phrase which creates the very unity of effects which waging that war in the first place seeks to deny.

The "global war on terror" is astrategic (if such a word exists). Its declared objective is to eliminate a means of fighting, not to achieve a political goal. It lacks a clear geographical focus: specific wars in particular parts of the world are subsumed in an overarching but amorphous and ill-defined bigger war. Traditionally strategy has been shaped above all by considerations of space and time. The "global war on terror" is unclear about the space in which it is set, or, rather, it is clear, but the notion that it embraces the whole world is not particularly helpful. It creates a field of operations too big for the world's only superpower. The United States has adopted a strategy where it cannot use the battle for the purposes of the war. Not even its awesome military power can be sensibly and successfully applied within such a framework.

Its definition of time is equally destructive of a coherent approach to strategy, as the alternative title of the "long war" indicates. How long is "long"? The adjective "long" is a relative term whose only counterpoint is "short", and the definition of what wars are long and what short lies in the eye of the beholder. We only see the First World War as long because we are told that those who went to war, partly conditioned by the sweeping Prussian victories of 1866 and 1870, expected to be home by Christmas. However, that was not a general staff planning assumption in 1914: before the First World War most senior officers were well aware that, if a major war broke out, it was likely to be longer than what had gone before. Helmuth von Moltke the Elder, the chief of the Prussian general staff in 1866 and 1870, expected it to be another Seven Years War or even a Thirty Years War. In fact he was being too pessimistic. As the First World War was finished in just over four years, it could actually be argued that it was in fact a "short war" after all. Not only was it much shorter than either the Thirty Years War or the Seven Years War, it has also proved to be shorter than many wars which have followed it, including the Second World War and, at the current rate of progress, even the ongoing war in Iraq.

And there is a further major block to the formation of a coherent strategy. All those wars had clearly defined enemies; neither the "global war on terror" nor the "long war" does. Wars are defined by the hostility which underpins them: the participants need to know who the enemy is, not least to be able to

construct a strategy with which to direct the war. The enemy in the "global war on terror" can range from a number of malicious individuals, notably Osama bin Laden and Saddam Hussein, to entire ethnic and religious groups. It is revealing that "defining the enemy" is now a growth area in strategic studies.

Strategy is a profoundly pragmatic business: it is about doing things, about applying means to ends. It is an attempt to make concrete a set of objectives through the application of military force to a particular case. Even when the Bush administration seems to be applying strategy in this sense, it still is not. The current "surge" in Iraq finds its overall direction simply from the resolve to increase the number of troops in the theatre of war. Nothing has been done to produce a viable political solution towards which their efforts can be directed, a point made by General David Petraeus on 8 March 2007, in his first major statement to the press after his arrival in Iraq: "military action is necessary … but it is not sufficient", he said.[1] In other words strategy lies at the interface between operational capabilities and political objectives: it is the glue which binds each to the other and gives both sense. But it is even more than that: it is based on a recognition of the nature of war itself.

Strategy has to deal in the first instance not with policy, but with the nature of war. To be sure, strategy should serve the ends of policy, but it cannot do that if it is not based on a clear-eyed appreciation of war. War is distinct from policy. Over the last thirty years Western military thought has been hoodwinked by the selective citation of one phrase from Carl von Clausewitz's own introduction to his unfinished text, *On War*, that "war is nothing but the continuation of policy with other means".[2] That is the statement about how governments might use war; it is not a statement about the nature of war, as a reading of what follows makes clear. The title of *On War* self-evidently indicates that it is a book about war, not policy. Clausewitz says very little about the relationship between war and policy, and even less about policy itself. Michael Howard and Peter Paret have argued that a second introductory but undated note, in which Clausewitz said that he regarded book I, chapter 1 of *On War* alone as complete, was written in 1830, shortly before his death. Thus they have been able to privilege that opening chapter over the rest of the text, and so elevate the nostrum concerning war's relationship to policy over many other – often competing and sometimes contradictory – ideas advanced by Clausewitz. The pre-eminent German Clausewitz scholar of modern times, Werner Hahlweg, believed that the note was written in 1827, and if he was right it belongs at the beginning, not at the end, of what we know to have been a very productive period for

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1   *Herald* (Glasgow), 9 March 2007.
2   From Clausewitz's note of 10 July 1827, in *On War*, edited and translated by Michael Howard and Peter Paret (Princeton, N.J.: Princeton University Press, 1976), p. 69.

Clausewitz's thought. In other words there is a good case for saying that book I, chapter 1 should not be alone in receiving canonical status, and that a great deal else in *On War* can be regarded as the fruit of the "late" Clausewitz. Much of the rest of the text, and especially book VIII, says different things about the relationship between war and policy, and about the nature of war.

There is of course a problem in translating the German noun *Politik* into English, since it can be rendered both as politics and as policy. Politics are inherently adversarial, and in this respect at least are like war. Policy has a more unilateral thrust. Governments have policies to tackle problems. They may adapt and refine those policies in the light of circumstances and as they implement them. (In this respect, of course, war shapes policy, not the other way round.) But a policy, at least in its idealised form, remains a statement of one government's intent.

War on the other hand is bilateral and even (as in the case of the Iraq war) multilateral. Governments have policies which lead them into wars, but once they are engaged in conflict those policies are shaped by the actions of the adversary. War is therefore not the unilateral application of policy any longer but the product of reciprocal exchanges between diverging policies. Moreover, that interaction itself creates an independent dynamic, that is both incremental and unpredictable. The wars which have fulfilled the original policy objectives of one side, such as the wars of German unification in 1866 and 1870, have been few – and mostly very short. More often wars themselves have shaped the policies of the belligerents, so that the governments' policies at the outset of a war have not proved consistent over its course. The actual outcome of the war, even if still desirable from the point of view of at least one of the belligerents, is likely to have been very different from the objectives entertained at its outset. The Second World War is a case in point, the current war in Iraq even more so. As one Iraqi exile, Sami Ramadani, has written: Bush and Blair "allegedly launched the war at first to save the world from Saddam's WMD, then to establish democracy, then to fight al-Qaeda's terrorism, and now to prevent civil war and Iranian or Syrian intervention".[3] There could be no more graphic illustration of war's reciprocal effect on policy.

Strategy therefore has to rest on an understanding of war and war's nature because it will shape policy. That is why both Bush and Blair have lacked a strategy, because neither understood the nature of war. Both were hoodwinked by the dominant narratives used to explain the recent wars of the West, wars which put them in the framework of 1866 and 1870, not of 1914–18 or of 1939–45. From the Falklands War of 1982, through the first Gulf War of 1990–

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3   Sami Ramadani, "In Iraq, public anger is at last translating into unity", *Guardian*, 20 March 2007.

91, to the Kosovo campaign of 1999, their countries waged wars that were short and sharp, and incurred minimal casualties for their armed forces. They – and not only they, but also their electorates – came to believe that war was indeed a reliable and malleable instrument of policy.

Strategy has collapsed as a tool for the shaping and understanding of war. It no longer has coherence as an intellectual concept. It is also homeless: the institutional framework which provided the basis for the national use of armed force has been forfeited. In 2002–03 the Bush administration sidelined the Joint Chiefs of Staff and ignored the National Security Council; in London, the British government left those with real and strong concerns about the management of the post-conflict phase of the invasion of Iraq without a forum in which to express their anxieties. Neither Bush nor Blair has promoted a style of government which exploits existing institutions; both favour informal networks, which sidestep established procedures. If that is the will of the leader, it is probably impossible to counter it. However, the fact that in both the United States and Britain strategy not only has little intellectual purchase, but also lacks a governmental body responsible for its creation, has much older and deeper roots than the naivety of Bush and Blair.

Until 1918, as the references to Clausewitz have already suggested, strategy rested on a fairly widespread and common set of assumptions, at least within armies and within Europe. Clausewitz's definition, that it was the use of the battle for the purposes of the war, was much narrower than anything current today. For him, but also for most of those who waged war in the nineteenth century, strategy was the province of generals, not of politicians, and it concerned the conduct of war within a particular theatre of war: it was therefore much closer to what today's NATO armies would call the operational level of war. But in 1918, that definition of strategy could not account for the result of the First World War. The operational concepts of classical strategy could not wholly explain even the military outcome of the fighting: the German armies on the Western front had not been defeated by envelopment or by breakthrough. In a broader context, strategy as defined by Clausewitz and his peers (if such there were) did not allow for the economic blockade of the Central Powers, or for the argument that Germany had been "stabbed in the back" because starvation at home had led to revolution and the abdication of the Kaiser.

Clausewitz had said nothing about sea power, and therefore one challenge that classical strategy had to confront in 1918 was that posed by maritime strategy, particularly if the allied victory in the First World War was indeed brought about by sea power, as thinkers like Basil Liddell Hart argued in the inter-war period. Although the application of British sea power in the era of *Pax Britannica* had pointed the way to its importance, then as now there was a tendency to see maritime strategy as belonging in a separate compartment from

strategy itself. This was an issue for the United States as much as for Britain, even more cut off from mainland Europe and equally reliant on its navy rather than its army for its principal defence.

In 1911 Julian Corbett, the first really important strategic thinker produced by Britain, who had read Clausewitz, argued that naval strategy was not a thing by itself. His lectures to the Royal Naval War College distinguished between what he called minor strategy and major strategy. The latter

> in its broadest sense has to deal with the whole resources of the nation for war. It is a branch of statesmanship. It regards the Army and Navy as parts of the one force, to be handled together; they are instruments of war. But it also has to keep in view constantly the politico-diplomatic position of the country (on which depends the effective action of the instrument), and its commercial and financial position (by which the energy for working the instrument is maintained).[4]

Corbett's "major strategy" prefigures what Britain would call "grand strategy" and the United States "national strategy". The phrase "grand strategy" was introduced to British military thought in the aftermath of the First World War by J.F.C. Fuller in 1923. Fuller added a further dimension to Corbett's notion of major strategy. He stated that "our peace strategy must formulate our war strategy, by which I mean that there cannot be two forms of strategy, one for peace and one for war".[5] Strategy was now to be applied in peacetime, since how a nation fought a war would largely be the product of the preparations, planning and procurement it had done beforehand.

Liddell Hart, the other great British military thinker of the inter-war period, also embraced the notion of grand strategy, contrasting it with what he called pure strategy – by which he meant the art of the general. Grand strategy's purpose was "to coordinate and direct all the resources of the nation towards the attainment of the political object of the war – the goal defined by national policy".[6] Grand strategy was what Britain and its allies put into effect in the Second World War. It was the application of national policy in the war, and it involved the coordination of allies and of efforts in different theatres of war: thus the overarching edifice of the British official history of the Second World War is the six volumes of the appropriately titled "grand strategy series".

After 1945, therefore, strategy and policy had become conflated in men's minds, and this conflation remained entirely appropriate in the Cold War. As Fuller had demanded, strategy was now applied in peace as well as in war;

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4   Julian Corbett, *Some Principles of Maritime Strategy*, ed. Eric Grove (Annapolis, MD, 1988; 1st ed. London, 1911), p. 308.
5   J.F.C. Fuller, *The Reformation of War* (London: Hutchinson, 1923), p. 218.
6   Basil Liddell Hart, *When Britain Goes to War* (London: n.p., 1928), p. 83.

it focused on the threat to use force, in the shape of nuclear war, to prevent war rather than to wage it. Moreover, if there were to be war, it would be an existential war, a war for national survival, like the two World Wars but even more so. These were the circumstances in which the conflation of strategy and policy made most sense. If a nation is fighting for its existence, its national policy is to wage war: all that it does in the political realm is bent to that end. As Clausewitz observed in book VIII of *On War*, "As policy becomes more ambitious and vigorous, so will war, and this may reach the point where war attains its absolute form".[7] In other words, in major wars, policy sets goals which are more fully consonant with war's true nature, with the unfettered violence that is at its core, than is the case in wars for lesser objectives. Since 1990, the United States and Britain have fought wars that have not been wars for national survival, and so the paths of policy and strategy, which were convergent in the two World Wars and in the Cold War, have become divergent. Since 9/11, Bush and Blair have tried to overcome this divergence by using the rhetoric of "total war", or rather of the "global war on terror". But in doing so, they have failed to understand the nature of the war on which they have embarked, which seems far from "total" to the societies which they seek to mobilise. A policy for national mobilisation for war does not make sense either to neutral opinion (whose existence, in the tradition of "total" war, they refuse to acknowledge) or even to their own electorates, not least when the efforts of both administrations continue to give priority to a whole raft of issues which would be of second-order importance if either country were really engaged in what it saw as a major war. The true nature of the war on which their countries are embarked requires the intellectual recognition that the two elements, strategy and policy, are both separate in their needs and possibly divergent in their directions. The object is of course to bring them into harmony, but that is not easy: they are different in their natures and pursue different sorts of outcomes. Generals seek decisive victories in battle but even when they achieve them they still don't necessarily win the war: Napoleon learned that, and the United States is relearning it.

We live with the intellectual legacy of the Cold War more than we recognise. Then deterrence and dissuasion were the essence of strategy: reciprocity was played out through threats, bargaining and crisis management, but it was a field of activity devoid of actual fighting. The wars fought by either side were defined, in the jargon of the 1960s, as "limited wars" or "low intensity conflicts": in other words they were not assimilated into mainstream thinking about war, but were treated as exceptions to the rule. The latter was identified less with the wars of colonial withdrawal or with Korea or Vietnam than with the war in Europe in 1944–45. "Major war", confined to a theoretical existence through

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7   Clausewitz, *On War*, book VIII, chapter 6A (1976), p. 606.

war games and exercises, promoted the notion that battle was fought "symmetrically", between forces that emulated each other and had comparable capabilities. The pursuit of balance was vital to mutually assured destruction, the foundation stone on which deterrence came to rest. But deterrence said nothing much about what generals did in wartime. Notions of victory seemed irrelevant at best and often obscene, since victory in European warfare would not, it was argued, be secured without the use of nuclear weapons and that would involve catastrophic destruction. Soldiers lost control of strategy, and so the discipline which defined and validated the art of the commander, the business of general staffs and the processes of war planning, was no longer theirs.

The discovery of operational thought, first by the army of the United States and then by the armies of NATO, was a way out of this dilemma. Required in the 1980s to think about conventional warfare, partly because of the body blow inflicted on the army of the United States by the defeat in Vietnam and partly because of the need to find useable alternatives to an all-out nuclear exchange within Europe, armies found themselves tackling war, not policy: they had to embrace war's reciprocal nature. However, in doing so, they still accepted the superstructure of the Cold War and the final arbitration of nuclear deterrence, and so continued to allow strategy to be a synonym for policy. When generals now thought about war, they called it the "operational art", although at one level it was no more than a reiteration of classical strategy. Its obvious product, "manoeuvre warfare" drew a straight line from Napoleon at Marengo or Jena to Norman Schwarzkopf in the first Gulf war.

Two major deficiencies have, however, increasingly dogged the dominance of operational thought in military doctrine. The first has been its tendency since the end of the Cold War to ignore the true nature of war, its reciprocity, its unpredictability and its friction. In the 1991 Gulf War none of these played as significant a role as in most wars in the past: the tenets of manoeuvre war, the product of the thinking of the 1980s, were implemented with overwhelming success in short order, and so became enshrined not as the last hurrah for Cold War military thought but as the benchmark for the future. The victory spawned a succession of ideas, among them the "revolution in military affairs", "network-centric warfare" and "transformation", all of which focused on the unilateral application of military superiority. It is worth recalling that NATO's thinking on manoeuvre war had been developed against the background of presumed inferiority in the face of a Soviet invasion of northern Germany: its core idea was to use the counter-stroke within a defensive context and as a substitute for the conventional strength of the Soviet Union . Its successor concepts have assumed the use of military force in an offensive mode, based on overwhelming and apparently unanswerable military and technological superiority.

Increasingly, too, operational thought has developed in a policy-free environment. This did not matter in the 1980s as the political framework was implicit within the Cold War. After the end of the Cold War, NATO armies lacked scenarios into which their operational capabilities fitted. For an army like Britain's this was not a new experience. In the nineteenth century its imperial responsibilities had put a premium on flexibility and adaptability. For other armies, used to thinking about possible wars predominantly against their neighbours, the lack of an obvious threat within Europe created intellectual uncertainty. The presentation of "manoeuvre war" as a one-size-fits-all model covered over the fact that in the past flexibility did not necessarily have much to do with the operational level of war. Concepts like tempo and "manoeuvrism" did not worry the heroes of Victorian "small wars" like Garnet Wolseley. Success was predicated on an awareness of the vagaries of the climate, on its impact on medical requirements and transport needs, and on the economic infrastructure and social conditions of the region. Effective commanders had to be anthropologically and politically aware if they were to understand the dynamics of war in different regions of the globe. The "operational level of war" tried to ignore this problem by treating the "battlespace" as something to be shaped by common military doctrines and their attendant technologies. The only anthropological insights revealed by "the revolution in military affairs", "effects based war" and "transformation" are those which concern their authors.

Thanks to Colin Powell and his intellectual legacy, American military thought has been quite explicit about its separation from the context of policy. Powell was the military advisor to Caspar Weinberger, the Secretary of Defense, who in 1984 articulated the so-called "Weinberger doctrine". In 1992, as Chairman of the Joint Chiefs of Staff, Powell himself set out the "Powell doctrine". Smarting from the effects of the Vietnam war on the US army, Powell said that US forces should be used to achieve clear political objectives which should be determined in advance, and that they should be deployed with overwhelming military force to achieve a quick victory: their "exit strategy" should be mapped out at the same time as their entry. Powell thought he was being Clausewitzian; he was trying to integrate strategy and policy by setting clearly defined and separate spheres of responsibility for each. What he had failed to do was to recognise Clausewitz's distinction between norms and practices, between the ideal and the real. Strategy and policy are indeed distinct in theory, but strategy in practice rests on a dialogue with policy. Confronted in 1992 with Powell's logic, which effectively blocked the deployment of American troops in Bosnia, the Secretary

of State, Madeleine Albright, memorably asked, "What's the point of having this superb military that you're always talking about if we can't use it?"[8]

The Powell doctrine has collapsed in practice. The Bush administration has been determined to use its armed forces, even when the chiefs of those armed forces advise against it or urge their employment in ways other than those favoured by the administration. Powell would no doubt say that the results of not using overwhelming force and not having a clear "exit strategy" are evident for all to see. But in advocating a rigid demarcation between strategy and policy, he prevented the engagement of one with the other, and his legacy survives in principles to which many in the United States army still adhere. The fact that General David Petraeus's call on 8 March 2007 for a political solution in Iraq was still seen as sufficiently exceptional to be newsworthy makes the point. The generals' normal currency, the operational level of war, has been kept in a separate box from policy, and there is a collective failure to appreciate the effect of war on the evolution and even transformation of policy itself, despite the fact that the current war in Iraq provides vivid evidence of exactly that. What the Iraq war also shows, and a point that Powell also failed to address, presumably as a consequence of his belief in American military superiority, was the fact that it would be the enemy – more than the American government – that would be trying to prevent the United States army from achieving quick victory. Classical strategy, and Clausewitz in particular, recognised that the relationship between strategy and policy was central, even if contested. Powell and his heirs have worked hard to resolve that contest by divorcing policy from operational thought. Prussian generals did much the same in 1870–71: Moltke argued that the politician should fall silent when the war broke out. Bismarck did not let him get away with it, but Moltke's case had more legs than it deserved, partly because he was perceived to have delivered an overwhelming victory which did provide the political outcome which Bismarck sought.

In the twenty-first century American generals, however much they may sound like Prussian generals in some of their nostrums, have not been so lucky. In Afghanistan in 2002 Bush and Rumsfeld asked the United States armed forces to fight a war totally different in design and nature from that for which they had prepared. The Joint Chiefs of Staff, equipped with one set of operational concepts, found themselves at odds with a Secretary of Defense who thought he could shape the conflict in Afghanistan to suit another. In Iraq the problem was overcome by the simple decision not to coordinate policy and the operational level of war. At CENTCOM in 2002 General Tommy Franks told Paul Wolfowitz that he should "Keep Washington focused on policy and strategy.

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8   Colin Powell with Joseph Persico, *My American Journey* (New York: Random House, 1996; 1st edn 1995), p. 576.

Leave me the hell alone to run the war".[9] Once into Iraq, Ambassador Paul Bremer said that his job was policy and General Sanchez's was the war, and that each should stick to his own sphere.

Strategy, however, lay exactly where the two spheres intersected. By 2003 it had lost its identity: part of it had been subsumed by policy and part of it by operational thought. Because neither the politicians nor the soldiers had a clear grasp of what strategy was, they could neither put the pieces back together again nor develop a clear grasp of the nature of the wars in which they were engaged. Moreover, without a clear grasp of strategy, they could not see what had really changed in war as opposed to what merely seemed to have changed. By confusing strategy with policy, and by calling what are, in reality, political effects strategic effects, governments have denied themselves the intellectual tool to manage war for political purposes, and so have allowed themselves to project their daily political concerns back into strategy.

Terrorism is the most obvious case in point. Terrorism was not invented on 9/11. It is a means to wage war, not an objective of war: this is why the "global war on terror" is so strategically illiterate. But what is new is the exaggeration of its effects through the media and in turn through the reactions of political leaders. Strategy, because it is in dialogue with policy, is affected accordingly. Its ability to put terrorism in context and in perspective is undermined. The novelty of terrorism lies not in its own actions but in the responses to the governments trying to oppose it, which paradoxically themselves accord it the very effects that they seek to deny it.

Terrorism is not the only facet of contemporary conflict that is not new. Non-state actors, many of them in the business of war for personal profit, were features of medieval and early modern warfare: indeed, the effort by seventeenth century European states to establish a monopoly on the use of armed force was in part a direct response to the suffering and destitution, the rape and pillage, wrought by competing freebooters, mercenaries and private military companies. Moreover, outside Europe many of those native populations which resisted colonialism in the nineteenth century did so not as representatives of states or to further political objectives, but to defend their religious beliefs, their ways of life or their control of resources: their motivations were existential rather than utilitarian. The methods that they used against their European opponents were (in today's jargon) asymmetric. Knowing that, if they directly confronted an organised and disciplined military force, they would lose, they reacted pragmatically and avoided battle. Their strengths in war rested on their local knowledge and

9   Tommy Franks with Malcolm McConnell, *American Soldier* (New York: Regan Books, 2004), p. 440.

their links to the population, and their methods were those of guerrilla warfare and even terrorism.

The identification of "asymmetric warfare" as a fresh phenomenon reveals how naïve Western strategic thought has become. As any decent commander knows, even when two armies with comparable organisations and similar weapons systems confront each other, they will not fight "symmetrically". Instead they seek to exploit each other's weaknesses, often looking for the line of least expectation to maximise their own relative advantage. Even the application of overwhelming military force by one side against another is "asymmetric". "Symmetrical warfare" was a product of the Cold War, of the absence of war: it is what armies do in their peacetime imaginations, when they compare a putative enemy's capability with their own and then convert their conclusions into demands for fresh equipment from the defence budget. The popular belief that "asymmetric war" is new is therefore a reflection of the way in which the peacetime norms of the Cold War have shaped the understanding of strategy.

Nor are many of today's wars being fought for reasons that look very new. The impending security concerns of the twenty-first century, climate change, the growth of urban shanty towns, the spread of global epidemics, immigration and competition for resources have yet to have much impact on strategy in practice. They provide the framework for modelling in defence departments, building scenarios for the future, but their consequences are not yet with us – and it could be argued that with good management they never will be, at least as causes for war. Today's wars are being fought for very traditional reasons – for religious faith, political ideology, nationalism, and ethnic identity. Moreover they are being waged in parts of the world where armed conflict and political instability have been endemic for decades, including Iraq, Israel, Afghanistan and the Horn of Africa. Historical illiteracy is a besetting sin of Western governments anxious to deploy forces in regions where memories are somewhat longer. Old conflicts have been given fresh energy by the rationalisations for war embraced in the West. Regional wars have been subsumed within the "global war on terror" and so gained greater significance. Humanitarian intervention, however laudable its motivation, has frequently done less to end the sufferings of a subject people than to make them the concern of the wider international community.

In other words the big change in war has been the overt readiness of the West to use it as an instrument of policy. The chronological caesura was less 2001 than 1990, less 9/11 and more the end of the Cold War. Since then deterrence has lost its salience in both the United States and the United Kingdom. The former does not use the concepts of the Cold War to manage its relationship with Iran; the latter, debating the future of the Trident missile system in the winter of 2006–07, made no effort to incorporate deterrence thinking into the wider context of national strategy and or of its defence capabilities. Before 1990 strategic

studies flourished on the back of the idea that their purpose was to avoid war; since 1990 we have been using war but strategic studies have paradoxically gone into decline. If war is an instrument of policy, strategy is the tool that enables us to understand it and give us our best chance of managing it.

Part of the solution to our present dilemmas is conceptual. Reading the bits of Clausewitz that we glossed over in the Cold War would not be a bad beginning. *On War*'s opening definition of war is not that it is a political instrument but that "it is an act of force to compel our enemy to do our will":[10] in other words, it is the clash of two competing wills. An unopposed invasion of Iraq would not have resulted in war. An attacker needs to be resisted for fighting to occur: as Clausewitz made clear in the book of *On War* which accounts for a quarter of the whole, book VI, war therefore begins with defence. As a result the directions which war takes are unpredictable, because its nature is defined by the competition between two opposing elements, with each side doing its best to prevent the other achieving its objectives. Those objectives will themselves be adapted in the light of the war's conduct and course. The more protracted the conflict, the more other factors – both those extraneous to the war itself and those intrinsic to it (including chance and what Clausewitz called "friction" and what we might call the "fog of war") – will shape it.

There is plenty in Clausewitz that can continue to inform our current concerns, but *On War* will rarely, if ever, be read by statesmen or politicians: not even Bismarck, as far as we are aware, did so. The bigger and more difficult challenge is the need for institutional change, not intellectual awareness. Governments at war need and use different agencies from those they use in peace. Those NATO states contributing forces to ISAF in Afghanistan do not see themselves as at war: the domestic impacts of their military actions overseas are limited. That observation is certainly applicable in the United Kingdom and possibly applicable even in the United States. As a result no state has sufficiently adapted its defence agencies from their Cold War focus on acquiring capabilities to the current priority, which is the business of making strategy. Waging war requires institutions which can address problems that lie along the civil-military interface, and can do so on the basis of equality rather than of military subordination to civilian control. Politicians need to listen to soldiers, to what can be done in practice as opposed to what the politicians might like to be done in theory, and to do that states need institutions within which soldiers feel ready to be realistic about the military issues – and about the messy and confused nature of war.

In both the United States and the United Kingdom recent public pronouncements have made clear the absence of institutions which enable this to

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10   Clausewitz, *On War*, book I, ch. 1 (1976) p. 127.

happen – or their failure to deliver where, as in the United States, they already exist. In the United States service discontents have in the main been confined to the anger of retired senior officers. In Britain, both the Chief of the General Staff in November 2006 and the First Sea Lord more recently, in February 2007, have briefed journalists on issues that belong squarely on the interface between civil and military leadership, and where their views differ from those of the government. Both their statements and the press's reaction to them suggest that Britain lacks the machinery for the proper articulation of their concerns. This has not always been the case. In 1902, in the era of classical strategy, Britain created the Committee of Imperial Defence to bring service chiefs and political leaders around the same table. In 1916 David Lloyd George created a war cabinet for the same purpose, and it possessed executive as well as advisory powers. This was a mechanism adopted as recently as 1982 by Margaret Thatcher. The essential features of such bodies were: comparable representation from both sides of the military and political divide; regular, even daily, meetings in time of war, so that strategy remained rooted and responsive to the situation on the ground; and equality in the weight given to military and political viewpoints.

Today Britain does not even possess the institutional basis from which to begin. The Nott-Lewin reforms of 1982 gave the Chief of the Defence Staff his own staff, and so emancipated him from reliance on the single service staffs. They made him the government's principal strategic advisor. But there is little public evidence that the Chief of the Defence Staff has had much influence since the early days of the Blair government. The Prime Minister listened to General Sir Charles Guthrie; neither of his successors, Admiral Sir Michael Boyce or General Sir Mike Walker, seems – at least overtly – to have had much impact on Blair or the development of strategy. Precisely how does the Chief of the Defence Staff make his views heard? Operational control of the British armed forces is exercised through the Permanent Joint Headquarters at Northwood. What are the relationships between Northwood and the Chief of the Defence Staff in Whitehall? This is an internal Ministry of Defence issue. More importantly, how does either link to the Foreign and Commonwealth Office or to the Department for International Development? All three government departments – the Ministry of Defence, the Foreign Office and the Department for International Development – are represented on the Prime Minister's committee on Defence and Overseas Policy, but the Chief of Defence Staff attends only by invitation.

If wars are to be waged in the twenty-first century, those waging them will need a firm grasp of strategy. Strategy will not flourish if the armed services are silent on the issue, or feel themselves to be constrained by norms in relation to the proper and "politically correct" conduct of civil-military relations. Just as politicians will never read *On War*, and so – by extension – will fail fully to understand war's true nature, so it is beholden on servicemen to embrace a

sense of strategy that is at once both classical and at the same time unfettered by politically correct notions of its subordination to policy. The first step in this process is a clear articulation of what strategy is; the second is its application in the machinery of state.

THINKING ABOUT THE UTILITY OF FORCE IN WAR AMONGST THE PEOPLE

by Rupert Smith

INTRODUCTION

Consider this: in 1914 the men of Europe marched under their countries flags in their thousands and died on the battlefields in their thousands, in the cause of their nation state in an almost industrial process. In 1939 they did it again and in addition the states attacked the people and their industries in their homes and cities, in the Blitz, in the strategic bombing campaigns, in the Holocaust, and with the atomic bomb. And in September 2001 a group of people using the apparatus of the state attacked the totems of that state, in such a way and to such effect that the War on Terror followed – a war on a state of mind.

A conflict in which the US, a state with the largest, best-equipped military forces in the world, is unable to dictate the outcome desired. A conflict in which forces with great potential to exert power are unable to do so to advantage when challenged by forces that are by the same standards ill-equipped and disorganised. A conflict in which military force is unable to achieve the outcome desired as it did in the two World Wars.

It is my contention, argued in my book *The Utility of Force*, that this is not an anomaly but a radical shift in the very paradigm of war: instead of *industrial war* there is now a new paradigm of *war amongst the people*. The nature of our operations today and in the future is fundamentally different to that of the past and for which our institutions have developed to conduct successfully. The essential difference is that military force is no longer used to decide the matter but to create a condition in which the strategic result is achieved. As a result we do not move in the linear process of peace-crisis-war-resolution-peace that our institutions have evolved to manage to advantage. Now we are in a world of continual confrontations and conflicts in which military acts support the achievement of the desired outcome by other means.

When I talk of institutions I am referring to institutions of governance whether they be those of Oslo, Whitehall, or any other capital, whether they be parliamentary or administrative, and whether they be national or intergovernmental. I refer also to the executive institutions, the diplomatic, intelligence, armed and development services, and the multinational organisations we form from them. And I refer to the institutional relationships, process, and authorities that link them into a whole. I am not, except in general terms, referring to particular equipments or capabilities. It is the way we think about war and conflict

and how the institutions work together that has to change. To understand this shift one must first turn to history.

INDUSTRIAL WAR

Interstate industrial war evolved throughout the 19th century on both sides of the Atlantic, and came to culmination in the two World Wars of the 20th century. It originated with the French Revolution, with the creation of the modern nation state with its citizens. Napoleon applied this creation to the military with the *levée en masse* of citizens, which was the original form of modern day conscription. Going into battle with such an army drawn from such a state meant that France as France, rather than a French army, was at war. All the resources of the state, even in its pre-industrial form, were put at the disposal of the military for the purpose of definitive victory. And because of the *levée* there was a ready supply of manpower so Napoleon could risk his army and make bold manoeuvres in the knowledge that he could replace his losses, unlike his predecessors and contemporaries. With his skill and this understanding Napoleon set out to achieve his political goals directly by the use of military force. His use of force was novel, it was strategic, and his use of forces composed of citizen soldiers that took the whole nation to war was revolutionary.

Napoleon's evident strategic greatness was understood by few of his contemporaries, but one who did understand was Carl von Clausewitz. Much has been written of his monumental work *On War*, and many quote from it without reading it. Without attempting to reduce a seven volume work to a few sentences, it is appropriate to focus on two particular concepts.

The first was that a state at war could be considered as a trinity of the government, the army or military forces, and the people. These three can be considered as the sides of an equilateral triangle, in which the sides have to be in balance. Omit one side or reduce its size and the form of the triangle and its strength is negated or weakened.

The second idea was that the outcome of a battle could be understood as the product of a trial of strength and a clash of wills. You have only to imagine a boxing match to see the point, although one must suppose that the will to win is strong in each fighter, or why else is he in the ring? Nevertheless, as the trial of strength, the exchange of blows, continues one or other's will may be eroded. Of course war and battle are not boxing matches. At war, the military has the force and the will to win, known as morale, and this is backed up by the government and the people, as per the Clausewitzian trinity: the political will to win is found in and expressed by government, but this will is founded in the people.

The American Civil War reflected two crucial trends in the development of industrial war since it pitted the industrially developed North against the

agricultural South. The first is that the North adopted a strategy of attrition in which it set out to grind the South down while producing more and more itself. And the second is that the North, with Sherman's march through Georgia, attacked the people of the South so as to destroy the South's capacity to make and sustain war. It was a strategy that shattered their Trinity, separating the people from government.

By the second half of the 19th century all the continental European nations share certain characteristics:

1. Conscription. Young men are called up, do a period of military service, and are then placed on the reserve. Normally these reservists are assigned to reserve formations that are to be "mobilised" at a time of crisis.

2. A "mobilisation" process that to initiate requires a decision of the countries leader. There was a linear process, now called "crisis management" of peace-crisis-war-resolution-peace

3. A defence industrial complex – primarily ship building and the development of guns and rifles

4. A ministry of defence or something very like one, with a general staff below it charged with preparing the country for war. This institution works to the following logic:
   • to win a war and achieve our political purpose directly by force of arms, we must harness the full power of the state;
   • to do this requires us to "mobilise" all our resources. To do this is to stop normal civil life and so it must only be done at the last moment;
   • but to mobilise requires a plan, or at least a strategic direction, and to make a plan there must be an enemy. The most threatening case in terms of timing is our nearest, strongest neighbour. So we will prepare for war against that threat;
   • the plan prepared must seek to defeat the opponent as quickly as possible.

Over the next 50 years we see these institutions and the underpinning logic played out in the wars of German unification, in particular the Franco-Prussian War, and the First World War, and then the apex of industrial war: the Second World War. It was the final total war, and one which produced the ultimate capacity to attack the people – first with the V weapons and finally with the atomic bomb. But the atomic bomb, the proven weapons of mass destruction (WMD), ended the utility of industrial war: the best defence against a WMD is not to mass, and since military forces can be dispersed, the only targets left were the cities, the people.

Industrial war was no longer viable after 1945, but the underpinning idea that war was an absence of peace, and that events moved in a linear process

from peace to crisis to war to resolution to peace remained. And the institutions that had been developed to conduct industrial war remained – and it is these that have dealt with our conflicts in the past sixty years, not realising they were of another paradigm.

THE ANTITHESIS

The antithesis to industrial war also made its appearance during the Napoleonic wars. The Spanish people having lost the trial of strength with the French continued with the clash of wills: remember Clausewitz. The people rather than the formal army went to war and waged a small war, the guerrilla war. The basic tactic of the guerrilla is to engage only on his terms in the ambush and the raid, to avoid being pinned down in a fight for ground, and to depend on the people for support both physical and moral; in short, to engage only in tactical acts. In the circumstances of the time these guerrilla actions were not, as we say these days, decisive. But they were certainly significant: they maintained the Spanish people's spirit and individual national identity even though occupied, and they acted in today's terms as the deep operation in support of Wellington's Anglo-Portuguese Army of 70,000 men; of the 300,000 men the French had in Spain a little over 200,000 were tied down guarding the rear and hunting the guerrilla.

The ideas of the anarchists and the communist revolutionaries added to the basic tactical idea of guerrilla war. They produced a generic strategy of what came to be called *revolutionary war*, of three related components that enabled the use of the tactical acts to achieve a political purpose:

- the strategy of provocation. Here one seeks to provoke an over-reaction so as to paint the opponent in the colours of the bully, the oppressor, the tyrant and thereby gain sympathy, support, credibility for one's cause, and recruits. One also tests the opponent's tolerance and discovers the level at which he will react, so as to operate safely below that threshold;
- the propaganda of the deed. Here one establishes one's importance. You have to be taken seriously and be treated on equal terms. Publicity is crucial here, for by achieving publicity one exists, and by existing one becomes credible. And this attracts recruits and support;
- the erosion of the will. By operating to create a continuous and steady drain of men and resources with no prospect of a satisfactory cessation of the conflict, the will of those opposed to one is eroded. Minor concessions are granted or successes gained serially and can be built on incrementally.

When these strategic strands are woven together successfully in the particular circumstances, they have the effect of dislocating the opponents military actions from their political purpose, often to positive advantage.

We must now return to Clausewitz and his trinity. If we examine the trinities engaged in revolutionary war, in which the governance of the state is at issue, the people are common to both triangles: the government, the police and army – the security forces – and the people, on one side – that of the official state; and on the other the revolutionary leaders and their promise of a better life, the terrorist and guerrilla groups, and the same people. In other words the will of the people, the same group of people, is the identical strategic objective of both sides. And short of coercing their will in Stalinesque programmes of terror and mass deportation, this must be won by means and in a way other than the direct use of military force.

To be clear, at the tactical level and occasionally the theatre level, military force will have a part to play to provide the deeds, the provocations and erosion of will. The revolutionary or activist is using force and must be countered and defeated – however, he must be defeated in such a way that the military acts are coherent with the other measures to win the will of the people. There must be a robust logical linkage between the political purpose and the military act, if only to prevent the opponent's generic strategy from working to advantage. And it is this new way that links the military activity to the other measures of power at the tactical and theatre levels that is at the heart of war amongst the people – a way which many military, political and policy officials have yet to learn or understand, since they are still thinking in terms of industrial war.

SYNTHESIS – WAR AMONGST THE PEOPLE

So to pull the two strands of my analysis together; we have at the end of the Second World War developed industrial war to the point where we could destroy the people, the government and in large measure the environment in one or a few massive blows. In parallel its antithesis had developed as a successful way of seizing the state from its government. In our time the two ideas synthesised.

Instead of industrial war in which the opponents set out with the primary objective to win the trial of strength, devoting all their forces and resources to destroying the opponents capability to resist and thereby win the clash of wills we have now war amongst the people, war amongst the people in which the primary objective is to win the clash of wills. In industrial war the opponents seek to resolve directly by military force the political confrontation that was its cause. The objectives for the use of military force in industrial war are hard and simple: "take, hold, destroy, defeat", are the sort of words used, all describing the desirable outcome of a trial of strength. In war amongst the people the objectives are malleable and complex, they describe a condition, which enables intentions to be changed or formed by other means; an example would be "create a safe and secure environment". In war amongst the people military force does not resolve

the confrontation directly, the conflicts or forceful acts contribute to one or other side's efforts to win the clash of wills and thus decide the confrontation.

I wrote in the introduction that we were now in a world of confrontations and conflicts and I will explain what I mean by those words; I do not use them as synonyms. I came to use the word confrontation from gaining an understanding of game theory. A confrontation occurs when two or more bodies in broadly the same circumstances are pursuing different outcomes. Political affairs of all stripes, national and international, are about resolving confrontations.

But when one or both sides cannot get their way in the confrontation and will not accept an alternative outcome, they sometimes seek to use military force to get it – they turn to conflict. When this occurred with industrial war, we sought to resolve the matter by conflict; force was decisive strategically. But nowadays, in taking conflict as the course of action, and if you are weak and have little to lose, you do not play to the opponent's strengths; you follow the path of the generic strategy and the tactics of the guerrilla. You seek to use his strength against him and to not present him with opportunities to strike mortal blows. Or you seek to replicate his strength and like North Korea and others develop an atomic weapon while following the same generic strategy.

If you are very strong and have atomic weapons you have too much to lose in using them – which is why they have not been used since August 1945. And if you are strong you still have to find a way to exert power, to use your strength; for as the philosopher Michel Foucalt said, "power is a relationship not a possession". And that is now the problem of the West, or those who use conventional armies against "insurgents," "terrorists," "asymmetric opponents" and so forth: for if the opponent has moved amongst the people it is extremely difficult to establish this relationship to advantage since the underpinning idea of the strategies of provocation and so forth is to establish the relation to the disadvantage of conventional military force. The result is that the conflicts are sub-strategic; frequently only tactical, in effect.

So instead of a world in which peace is understood to be an absence of war and we move from one to the other in a linear process of peace-crisis-war; we are in a world of permanent confrontations within which nest conflicts, potential and actual, as the various opponents seek to influence each other's intentions, the confrontation, with military acts, the conflicts. But to be effective these acts must be coherent with and allied to the other measures that affect intentions.

It is these confrontations and conflicts which are the wars amongst the people, and they have six trends:

The ends for which we fight are changing, as already noted, from the hard absolute objectives of industrial war to soft more malleable objectives to do with

establishing a condition or changing intentions. In fighting industrial war we measured our gains in territorial and materiel terms. In war amongst the people we seek to win the clash of wills rather than the trial of strength; the objectives describe a condition, which enables intentions to be changed or formed by other means, an example would be "create a safe and secure environment", in which the strategic or political objective may be achieved by other means. In fighting amongst the people the ultimate objective is to capture the will of the people, and the more you want the outcome to include the rule of law and democracy, the more this is so. If a definitive victory was the hallmark of interstate industrial war, then establishing a condition to advantage may be deemed the hallmark of the new paradigm of war amongst the people.

Perhaps the single most unrecognised example of war amongst the people is the Cold War, which was never a war or conflict. It was a strategic level confrontation in which military forces were deployed, but force was never employed, to establish the condition of "deterrence"; to form or change an intention. And which ultimately changed the minds or intentions of the people as to their governance, first in the Warsaw Pact satellite states and then in the Soviet Union itself. There are other examples:

- The Korean War, where we changed our intentions when China intervened, because to do otherwise was to use the atomic bomb: we therefore settled for the condition of a divided Korea on or about the line on which the conflict started. And we have had to maintain the condition ever since, because the confrontation within which the conflict nested is unresolved and may well now be nuclear.

- The Yom Kippur War in 1973 when Sadat's objective was to create a condition by military force in which the confrontation between the Egyptians and Israelis over the Sinai could be resolved:

  What literally no one understood beforehand was the mind of the man: Sadat aimed not for territorial gain but for a crisis that would alter the attitudes in which the parties were frozen – and thereby agree the way for negotiations … Rare is the statesman who at the beginning of a war has so clear a perception of its political objective. … The boldness of Sadat's strategy lay in planning for what no-one could imagine; that was the principle reason the Arabs achieved surprise. … Sadat, in fact, paralysed his opponent with their own preconceptions.[11]

- Bosnia, Kosovo, and now Afghanistan and Iraq all give examples, regardless of the rhetoric at the time, of the military being used to establish a condi-

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11   Henry Kissinger, *Years of Upheaval* (Boston: Little, Brown & Co., 1982), p. 460.

tion, usually expressed as a safe and secure environment, rather than resolving the confrontation. And all of them are as yet unresolved.

The second trend is that **the sides are non-state**: we tend to carry out these actions in a multi-national grouping or in non-state groupings. Increasingly, we are in the former and the opponent is in the latter. These coalitions need not be the formal ones like the NATO Alliance or the UN or that in Iraq today, but are often – particularly in the theatre of operations – more or less informal, and include in effect other agencies, such as the OSCE or the UNHCR, or NGOs such as Oxfam or MSF, and local actors such as the Kosovo Liberation Army (KLA) in Kosovo or the Northern Alliance and later the army and police in Afghanistan.

These alliances, however formal, should be understood as collaborative confrontations, as opposed to those that are conflictual. After all, the parties to an alliance all have a slightly different interest in collaborating together, but they are resolved to work together or to abide by some rules or treaty and so they are in a collaborative confrontation. The more the desired outcome and the interest in the undertaking are held in common the greater the readiness to collaborate under the pressure of events. Anyone who has worked in a NATO headquarters or in a UN Force headquarters will recognise them as collaborative confrontations. The important point to realise is these collaborative confrontations have certain characteristics that limit the commander's freedom of action. They are that each grouping has:

- different political reasons for being in the force
- different sources of political support
- different sources of legitimacy
- different sources of materiel and logistical support
- different strengths and weaknesses
- different training and equipment
- a different culture
- often a different language.

The third and most obvious trend is that **we fight amongst the people**: Firstly, the objective is the will of the people. Secondly, the opponent often operating to the tenets of the guerrilla and the terrorist, depends on the people for concealment, for support both moral and physical, and for information. And thirdly the strategy of provocation and propaganda of the deed require the people to work. One has only to compare the casualty rates of the combatants and the civil population in the conflict zones of the world to see how the people form the battleground. But, fourthly, these conflicts take place amongst the people in

another sense, through the media: we fight in every living room in the world as well as on the streets and fields of a conflict zone.

Whoever coined the phrase the theatre of operations was very prescient. We operate now as though we were in a theatre or Roman circus. The theatre commander needs to produce a more compelling narrative than his opponent in the minds of the people; the people in the pit of the circus amongst whom the combatants move and act, and the people in the stands who view the drama through the media. But here there is a problem: all our short hand for war and conflict is founded on the experience of industrial war, and it is very difficult to explain in the time and space available what is going on without using the iconic word images of the past, particularly when large armoured vehicles or fast jets are literally in the picture. And by using the images and interpretations of the old paradigm of war, we fail to realise or explain the new one of war amongst the people, let alone dictate the narrative. The recent conflict between Israel and Hezbollah in July–August 2006, in that long running confrontation over the Lebanese/Israeli border, showed Hezbollah dictating the narrative to their advantage, so that in many eyes they were the "winners"; despite losing some 400 men, much materiel, their position of military autonomy in southern Lebanon, and having to apologise to the Lebanese for creating the situation in which Israel did so much damage to the Lebanese infrastructure.

The fourth trend is that **our conflicts tend to be timeless**: We set out to win industrial wars quickly, because the whole of society was involved and we wanted to get back to peace and have a normal life. In our new circumstances timing is more important than doing things to time. The basic tactic is to engage only on one's own terms, not today or on Tuesday, not when the opponent wants you to, but when it is to your advantage to do so. And when our military objectives are to set conditions in which other instruments of power resolve the confrontation, then we must maintain the condition until they succeed. We are still in Korea and Cyprus maintaining the condition as we are in Bosnia and Kosovo. The rhetoric at the time of the initial engagement, based on concepts of industrial war, said otherwise but the reality is before us.

The fifth trend is that **we fight so as not to lose the force**, rather than fighting by using the force at any cost to achieve the aim. No commander wants to suffer any more casualties to his men and equipment than he has to. But in industrial war it was in the main possible to replace his losses. We developed the production lines to do this: conscription, the training depots and formations, and the reserves, in the case of humans, and the industrial production lines together with the R&D organisations to provide the equipment. In large measure these production lines no longer exist. We are unable to replace our losses. We fight to

preserve the force for other reasons. We have to sustain the operation, because it is not strategically decisive we have to maintain the condition, and to do that needs a continuous presence. We fight not to lose the force for the same reason the guerrilla fights that way; it is expensive to acquire, move and prepare new men and equipment. And politicians at home uncertain of the peoples support for the venture, wish to keep the costs to men and materiel within what is politically sustainable in the circumstances.

The sixth and final trend is that **on each occasion new uses are found for old weapons**: those weapons and organisations acquired and developed for different purposes are now being endlessly adapted to war amongst the people. I am not arguing that commanders should not adapt their forces to the circumstances – indeed they should. Frequently we can see that our opponents are deliberately operating below the threshold of the utility of our weapons and organisations as we would wish to use them. If we are not using these equipments for the purpose and in the way we had intended, something must have changed.

Please note that in spelling out these characteristics I have not said there will not be big fights. Indeed, the examples of the Yom Kippur War that I gave in support of the characteristic of changed ends or that between Hezbollah and Israel in 2006 had plenty of big battles. Nor have I said that that these fights will not be in support of the achievement of objectives to do with state sovereignty. I am saying that force will not achieve this directly or strategically; it may, if used well, establish a condition in which the objective is achieved by other means.

WHAT IS TO BE DONE?

The consequences and implications of this change in the paradigm of war and these trends are many and will vary with particular circumstances. There is no simple set of measures to be adopted; this is a complex matter and the balance between changes will need to be struck carefully.

Nevertheless, the single most important thing to change is the way we think about the use of military force; to recognise the change in paradigm and that our institutional mindsets, developed and honed during years of industrial war, need to change. Force has utility, if it does not why are we so concerned about terrorist groups, the spread of nuclear weapons, war lords, ethnic cleansing, or is it genocide, in Darfur and so on? Why is it that our opponents appear to understand the utility of force rather better than we do? How do we bring our military force to bear to advantage?

If we are to change we must understand the complexity of what we are about and the fact that the institutions are functioning and engaged. In any event what is required is not to change the tools, the armed forces, but to change the way we use them and the outcome that results. We need to change

our method of using the tool and then when and where necessary, change the organisation and practice. If a metaphor helps to understand my point consider the world of art: the Impressionists used much the same brushes, paints and canvases as their predecessors, the Realists, they were trained as Realists; but they changed the way they thought about using the tools. They had a different outcome in mind and in practicing their art they developed a different method and organised the information differently to the Realists. What is needed is a similar shift in institutional thinking if we are to use military force to advantage in our present circumstances.

The second reason that we must have this profound change in understanding the use of military force, rather than in the first instance considering the tools or equipments, also results from the shift from industrial war to war amongst the people. In industrial war we set out to achieve advantage by having superior equipments in superior numbers. We knew or had decided on the worst-case opponent and we matched our inventories accordingly. Tactically the way these means were used was always important as it was occasionally at theatre level. But in war amongst the people where the opponent is formless, operating deliberately below the threshold of the utility of our equipments, as we intended them to be used, and amongst the people, with objectives to do with altering intentions rather than destruction, the way we use our equipments is a strategic, theatre and tactical decision each in turn.

Answering these questions will require us to reconsider when we are to use military force. As a generalisation the use of force was thought to be an act of last resort when considered in the paradigm of industrial war. But is it now?

- Is there an orderly process recognised by both parties in which force is the last act?
- Do both parties see force as an alternative to other options instead of being used in concert with them?
- And when all other options are exhausted, will force provide a resolution? If it doesn't, does one pile on more force, or will the price be too high to bear? What other options are there other than accept defeat? Or how do you terminate the engagement if your last resort is not working – is defeat an exit strategy?

In any event we have with all the other members of the United Nations in September 2005 agreed that we have a responsibility to protect the citizens of the world from abuse of their human rights – the unconditional surrender of Germany was brought about by force as an act of last resort but it did not stop the Holocaust – when do we use military force and in what combination of measures to discharge our responsibility to protect?

And is the answer to these questions the same at all levels from political to tactical? I suggest it is not, although we tend to behave as though it is. Often because we tend to use the words deploy and employ force as though they were synonyms. We need to understand the employment of force rather than the deployment of forces. Deploying forces is relatively easy; deciding when, on what and to what purpose to employ force is much harder, particularly when your objective is to alter intentions.

And this is made more complex because we must understand and decide on the other measures that are necessary to alter or form intentions: political, legal, social, economic and so on. Decide which has the lead or primacy and in what circumstances and thereby decide and designate the directing mind and logic – the arrangements for command and control. I say this because all our institutional structures, thinking and process are based on the conduct of industrial war, where the confrontation was to be resolved by military force with conflict at the strategic level. If conflict is only to take place at the theatre or more usually tactical level, how do we make the military acts coherent with and complementary to the other measures necessary to change or form our opponent's intentions and so win our theatre and strategic level confrontations?

And how do we do this in our multinational groupings? How do we bring together the other measures with those of the military, and provide the essential direction for all efforts in the theatre? NATO was designed to put a military strategy into effect. It has no capacity to handle political, legal or economic measures except when they affect its own existence. It only does force. The European Union has great potential in this regard: it does have the other organs of power, probably more developed than its military, and could produce coherent direction and action. This may well provide for the political and strategic direction to win the confrontation, but this must be brought together and under a directing hand in the theatre; for it is here that the opponent is faced, and if we lack the driving logic necessary to guide our actions, we will fail.

Force must be employed in conjunction with other means so as to defeat our enemies and gain advantage in the confrontation. Each fight won must contribute to achieving, however indirectly, the confrontational goal. Winning a conflict or fight without being able to exploit the result to advantage is an operational or strategic error which, if repeated, can lead to the phenomena of winning every engagement and losing the war. Like the Rhodesians in the 1970s or the USA in Vietnam.

We need to operate so that: the logical linkage between our desired outcome and our actions is strong and secure; we dictate the narrative; and we dislocate our opponent's military actions from his political objective. We must recognise that information is the currency of these engagements, and while fire-

power is the currency of the battle, battles must be chosen and conducted for the information they transmit and gain to our advantage.

We need to understand the nature of the confrontation and the outcome we want adopted. To do this we need information. We must operate to learn. We must operate to gain the information to uncover, to force the opponent to expose himself and his intentions and to show the difference between himself and the people. Much of this information is available: the opponent lives amongst the people and it can be collected by all who interact with the people. We need to understand the people just as the tactician has always sought to understand the ground. Until we understand the people how can we separate the opponent from them? How do we capture their will? Until we have the information we cannot decide on the right mix of force and other means, or the deployment and employment of the force and other means. Of course we must start with some mix, but we must operate to improve it in relationship with and to the disadvantage of the opponent.

We must respect our opponent, that thinking, formless being. We do not have to agree with him but we will not separate him from the people and find him, we will not change intentions until we understand the minds of those we wish to change. Our ability to collect and assess information about things is well practised, we are poor at collecting and understanding the information about people's intentions.

Until we have this information we cannot isolate the enemy from the people, we cannot be sure of our targets, we are reactive or lack the initiative. And until we have this information we cannot enforce the law, and until the law is in force, we cannot remove the military.

We must put information out. We must capture the narrative. We must understand the theatre of operations as a theatre and the theatre commander or director, for he need not and probably should not be a military commander, must be setting out in his campaign to write a more compelling script than his opponent. We must explain ourselves to the people in the theatre and those at home and in parliament.

I do not think our national institutions are capable of what I have described, and we are surely not capable of doing this internationally. Yet we are acting multinationally against opponents that are often not states or acting as states. Until we recognise the shift from the model of industrial war to that of war amongst the people and think about the use of military force accordingly we will not change our institutions so as to be able to achieve our purpose in the confrontation in which the conflict nests.

THE PROFESSION OF ARMS

The many questions posed in the forgoing paragraphs are not to be answered by the profession of arms alone, but the profession must have people capable of playing a positive part in the search for the answers. The armed forces are one of the institutions that have evolved in the old paradigm and are the essential institution of the new paradigm; armed force is evidently part of war amongst the people. The armed forces engaged in these conflicts are adapting in the face of the new circumstances and this operational experience needs to be distilled and developed in conjunction with the other agencies of power and governance.

The military must be ready to play their full part in the most necessary national and international debate to find the answer to the strategic question of our time: how and to what end and in what combination with other measures do we apply force sub-strategically in the conflict so as to gain our strategic and political position in the overall confrontation?

To this end the armed forces will need to be selecting the right leaders and developing them to do two complementary things: to go into the theatre to contribute to success and learn; and to return to argue the case for change based on the general principles gained from practical experience. This will require the selection of individuals who have the intellect and aptitude to innovate in adversity rather than the implementers who are so often favoured by the selection systems of institutions; particularly those like armies intended for industrial war where the priority is the conscripts' training cycle and the need to hold the force in readiness for mobilisation and the execution of the master plan. Now we need innovators, intelligent, practical, imaginative and bold, capable of operating successfully in novel circumstances.

While the leadership of such people will be most necessary at the head of the services, it will be required at all levels right down to junior non-commissioned officers (NCOs). The nature of war amongst the people places a high premium on imaginative leadership at junior levels. These leaders must understand the confrontational context within which they are operating and use their imagination in furthering the overall goal. The predominately middle class societies of Europe have such men and women in plenty; the difficulty is, and will be, getting them to serve. Doing this may well require the armed forces to change the basis of recruitment, retention, pay scales and so on.

The training of these people must be such that others are confident in their professional competence, and also their understanding of what else is being done as well as the overall context. The armed forces know well how important achieving a high level of mutual confidence is to successful joint and combined operations. But this must now be achieved with the other agencies that are operating in the theatre of war amongst the people. Until this mutual confidence exists we will find it difficult to work together to achieve the outcome we desire

in the confrontation; the single driving logic will be difficult to form and direct, and the opponent will find it easy to dislocate our military acts from our political purpose.

The debate as to the appropriate answer to the strategic question will of necessity require an understanding of the law and its interpretation. And this understanding is required by all those operating in the theatre. To a greater or lesser degree the desired outcome of wars amongst the people is to leave behind a state of law and order that we approve of; whether it is treaty law, international humanitarian law, or the local criminal law. To reach the stage when we can leave, we must change the currency of deterrence – more intention changing stuff – from the bullet to evidential information. To do deterrence with the bullet you must learn about and find the actual opponent before you strike, to do otherwise tends to serve his strategy. To do the other is to translate the information one has into evidential information supporting the prosecution. In all cases it requires one to operate within the law. For if a form of law and order is part of the outcome, then to act outside the law is to attack one's own objective.

The profession will need to change the operating logic to recognise that, as discussed already, information not firepower is the currency of war amongst the people. We must improve our ability to be precise. We tend to use precision and accuracy as another set of synonyms: they are not. To be precise you must have the information to understand the context of your actions so as to choose the right time and place, information on the target or objective so as to choose the right one at the right time, and the information to exploit the result. We must seek to network the effects of our actions not as we appear to be ourselves.

And we need information and the training and knowledge to handle the theatre; so that we present our case to the audiences of the world as they gaze on the actions in the pit, and our production is the dominant one. So that we establish the right context for our actions so, when viewed by others, they are understood as we would wish them to be. At the moment we are not good at this.

Because the primary objectives are to change intentions, and because information rather than applied firepower is the primary currency of this exchange, and because the opponent is formless, sentient and deliberately operating below the threshold of the utility of our systems: we must operate to learn. We must operate to cause the opponent to expose himself, to show his hand. We must take the long view and operate to sustain the operation over time. Both operating to learn and in the long term will require us to rethink force structures both nationally and internationally.

Each service and state will make changes to suit its own particular circumstances and these changes should follow the development of different practices to suit war amongst the people. Nevertheless, I anticipate an increase in

force elements whose primary purpose is to gather information and the striking elements will tend to be held more centrally. Forces will probably be held at readiness in smaller groupings than hitherto and be deployed as required to form a multinational force with the objective of having the least possible in theatre at any one time.

The largest change will take place in the organisation of command and control. I expect there to be less levels of command, because there is less need to manoeuvre mass. And headquarters will have to be trained and organised to operate according to either one of two different logics or to act as the "transformer" at the point where the logics change. Those engaged directly in the conflict, battle or fight will be operating to one logic, and those at levels above this will be operating to the logic of the confrontation; the headquarters on the interface having to translate the logic of firepower to that of information and vice versa. Understanding and setting the "level of the fight" to advantage will be an important function of command.

However, none of these anticipated changes will be of any value unless we change the way we think about the use of military force – the utility of force. We are all engaging in war amongst the people, states and non-states alike, in which our opponents, those formless, non-state actors, appear to understand the utility of force better than we do. And until we understand the nature of war amongst the people and adapt our thinking and institutional structures accordingly, our statesmen and generals will fail to deliver the victories and security we seek.

MILITARY THEORY AND EPISTEMOLOGICAL CHALLENGES

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by Harald Høiback

According to Ulysses S. Grant warfare is rather straightforward: "The art of war is simple enough; find out where your enemy is, get at him as soon as you can, strike him as hard as you can, and keep moving on."[12] The need for military academics does not seem pressing. Even the celebrated strategist Sir Julian Corbett pointed to the apparent futility of theorising about war: "There seems indeed to be something essentially antagonistic between the habit of mind that seeks theoretical guidance and that which makes for the successful conduct of war."[13] Nevertheless, despite the suspected futility of military theorising, many have tried to find the holy grail of warfare. To discover a way to assure victory in the next war without paying an appalling prize in friendly blood has been a dream for centuries.

In this chapter we will look at the two main strands within military theory, as represented in the works of Antoine de Jomini (1779–1869) and Carl von Clausewitz (1780–1831). Jomini and Clausewitz have traditionally been treated like rivals in a competition that the latter won, but here we will argue that such a conclusion omits important aspects of both war and theory. We will make the case that Jomini and Clausewitz complemented each other, however unwittingly.

However, our subject is not military thinking per se. Few would question the importance of being clever in battle: the use of force is surely not incompatible with using the intellect.[14] Here, however, our topic is theoretical thinking, i.e. the systematic contemplation and theory building that constitute the base of education and thus precede decision making in the field. On the battlefield itself, enlightened intuition, however educated, may do the trick.

MILITARY THEORY – THE FOUNDING FATHERS

When drawing the historical lines of military thinking, Niccolò Machiavelli is a tempting starting point because he has one foot in classical antiquity and the other in our time. Machiavelli's *The Art of War* not only mimicked the structure of the Roman Vegetius' *De re militari* but whole portions of the book were re-

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12 Azar Gat, *A History of Military Thought, From the Enlightenment to the Cold War* (Oxford: Oxford University Press, 2001), p. 292.
13 Julian S. Corbett, *Some Principles of Maritime Strategy* (1911) (London: Longmans, Green and Co, 1972), p. 1.
14 Clausewitz, *On War* (1976), p. 75

produced without modification.[15] Machiavelli is also the only Renaissance military reformer accessible to the general reader today. Hence, Machiavelli is *the* founding grandfather of military theory, not because of excellence, but because of timing.

In *The Prince* Machiavelli lamented the lack of Italian military prowess, and wrote that this was because "the old military systems were bad and there has been no one who knew how to establish a new one."[16] And he continued to assert that nothing would bring a man greater honour than the "new laws and new institutions he establishes."[17] To modern eyes this seems like an invitation to scrap history and engage head on with the future, without any cumbersome, mental luggage from days of yore. But to Machiavelli's generation "new" was not in the future, but in the past.[18] To the humanists of the Renaissance a perfect world had existed in classical times, and the task of improving the contemporary world implied regaining earlier, but forgotten practices: "The *new* laws of warfare therefore, which Machiavelli wanted to see introduced in Italy, were the *old* laws of the Roman military order."[19]

Certainly, Machiavelli's contemporaries were not blind to the fact that something had changed since the heyday of the Romans, especially such as the invention of gunpowder. Machiavelli was aware of this opinion: "You also say that many people laugh at the arms, armor, and military discipline of the ancients because, since the invention of artillery, these things are useless".[20] But Machiavelli did not share their concerns. Artillery could be of use, but only in an army in which "ancient virtue is mixed with it, but without that, against a virtuous army, it is very useless."[21] Consequently, the invention of artillery was no reason not to imitate the ancients.[22]

In the long run Machiavelli's diminution of gunpowder was a lost cause. More importantly though, his reliance on the authority of the classical world also seemed to become somewhat dubious. Following the inventions of the telescope and microscope, and the ensuing discoveries in astronomy and physics, Aristotelian science had become thoroughly discredited by the seventeenth century, and was blamed for "having held up scientific progress for cen-

15 Peter Faber, "The Evolution of Airpower Theory in the United States: From World War I to Colonel John Warden's *The Air Campaign*", in *Asymmetric Warfare*, ed. John Andreas Olsen, Militærteoretisk skriftserie, no. 4 (Oslo: The Royal Norwegian Air Force Academy, 2002) p. 47.
16 Niccolò Machiavelli, *The Prince* (London: Penguin, 1995), p. 82.
17 Ibid.
18 Felix Gilbert, "Machiavelli: The Renaissance of the Art of War", in *Makers of Modern Strategy*, ed. Peter Paret (Oxford: Clarendon Press, 1986), p. 21.
19 Ibid., p. 22
20 Niccolò Machiavelli, *The Art of War* (New York: Da Capo Press, 1965), p. 98.
21 Niccolò Machiavelli, *Discourses On Livy* (Chicago: The University of Chicago Press, 1996), p. 168.
22 Machiavelli, *The Art of War*, p. 99.

turies".[23] Francis Bacon (1561–1626) was quite implacable: "It would disgrace us, now that the wide spaces of the material globe, the lands and seas, have been broached and explored, if the limits of the intellectual globe should be set by the narrow discoveries of the ancients."[24] The post-Renaissance generation did not long for a disinterested philosophical contemplation of the order and harmony of the world as had the Greeks, but for an improvement of life, or as Francis Bacon put it, "for the relief of man's estate."[25]

It was not only the discoveries of new worlds, both literally and figuratively, that shattered the authority of the ancients. The Renaissance brought its own hangman, so to speak. The invention of the printing press made it possible for readers to compare a wide range of authors' descriptions of the same phenomena. Hence, the information explosion brought "rival assertions into a much wider circulation than ever before".[26] Furthermore, both the antagonists in the Reformation and the participants in the ensuing wars could lash out at each other using printed newspapers with propaganda and rhetoric. As such, the Thirty Years War had almost the same propulsive effect on newspapers as the Gulf War had on cable news. The sum total of this was a significant rise in scepticism in early modern Europe, and ironically perhaps, it was a soldier who most successfully fought this scepticism.

THE PRIMARY SCHOOL OF MILITARY THOUGHT – THE JOMINIAN LINEAGE

On 10 November 1619, a rather insignificant soldier took rest in a small cottage near Ulm in Germany. Whether it was due to the sauna-like temperature in the room or to some divine revelation, a couple of visions descended upon him that eventually made him lay "the philosophical foundations for what we think of as the 'modern' scientific age."[27]

This soldier was never to make a big name for himself in terms of soldiering, but he has been handed down to posterity as one of the greatest philosophers of all time. Not even the Greeks had been spared the rhetorical questions of the Sceptics, but this soldier, René Descartes, pushed this scepticism to extreme limits. Additionally, eventually turning him into a legend, he did not succumb to being a disillusioned sceptic himself, but shaped a new and apparently solid rock as the foundation of scientific knowledge.

23   Anthony O'Hear, *Introduction to the Philosophy of Science* (Oxford: Clarendon Press, 1989), p. 12.
24   From Bacon's *Refutation of Philosophies* quoted in Peter Burke, *A Social History of Knowledge from Gutenberg to Diderot* (Cambridge: Polity Press, 2000), p. 114.
25   O'Hear, *Introduction to the Philosophy of Science*, p. 12.
26   Burke, *A Social History of Knowledge …*, p. 200.
27   Ted Honderich, *The Oxford Companion to Philosophy* (Oxford: Oxford University Press, 2005), p. 188.

In short, Descartes inaugurated modern philosophy by making "questions about the validation of knowledge the first questions to be dealt with in the subject."[28] Philosophically, the question of *how* you know, became more important than *what* you know.

Despite the odd fact that theoretical thinking is not what you expect to find in military quarters, it may have been the seriousness of military business that first attracted Descartes' attention. In other walks of life you could apparently toss ideas around recklessly without any repercussions. But on the battlefield, any nonsense or gobbledygook could get you and your men killed, and ruin your country. Hence, men of action would probably have more truth to offer than scholars:

> For it seemed to me that I might meet with much more truth in the reasonings that each man makes on the matters that specially concern him, and the issue of which would very soon punish him if he made a wrong judgment, than in the case of those made by a man of letters in his study touching speculations which lead to no result, and which bring about no other consequences to himself excepting that he will be all the more vain the more they are removed from common sense[.][29]

Descartes eventually became entangled in matters other than military ones, and the first significant military thinker who stood on the shoulders of Copernicus, Galileo, Bacon, and Descartes, if unintentionally, was General Raimondo de Montecuccoli (1608–1681), the first proto-scientific military writer.

Montecuccoli was a professional warrior and had extensive military experience of his own. To him, real war was not made in the abstract, and in line with empiricism the art of command had to be acquired by practice: "under arms, in the field, sweating and freezing."[30] Montecuccoli had fought against the formidable Swedes and the Turks and had thus seen very different martial methods in use, which seems to have made him more curious and open-minded than his predecessors. He was the first to address the phenomenon of war in all its "strategic, tactical, administrative, political, and social dimensions".[31]

28 Ibid. p. 189.
29 René Descartes, "Discourse on the method of rightly conducting the reason and seeking for truth in the sciences." (1637) in René Descartes, *Discourse on Method and Meditations* (Mineola: Dover Publication, 2003), p. 8.
30 Raimondo de Montecuccoli, *Della Guerra col Turco* quoted in Gunther E. Rothenberg, "Maurice of Nassau, Gustavus Adolphus, Raimondo Montecuccoli, and the 'Military revolution' of the Seventeenth Century", in *Makers of Modern Strategy*, ed. Paret, p. 62.
31 Rothenberg, "Maurice of Nassau …", p. 36.

Montecuccoli was not afraid to place his own field of knowledge at the very apex of science:

> I have attempted within this concise framework, to encompass the vast areas of the only science vital for the monarch, and I have done my utmost to discover basic rules on which every science is based…and, having considered the entire range of world history, I dare to say that I have not found a single notable military exploit which would not fit in with these rules.[32]

Montecuccoli's aim was to use observation and experience to investigate every aspect of war, and draw up rules which could be systematised and be subject to reason.[33] The object was not a disinterested contemplation of the nature of war. On the contrary, in line with Bacon's "knowledge is power", Montecuccoli's object was not to capture the reality, but to overcome it. The aim of theory was not to systematise the full range of forms that social conflict might take, but to cut through them to gain intellectual mastery and better practical control. Both for him and almost all his successors, strategy would be "the box within which the violence of war could be contained."[34]

Theory, derived from reality, was then turned into rules that could guide and judge action. This two-stage process, of first reducing experience to universal and fundamental rules, and then applying them to particular times and circumstances by skilful judgement, is central to all subsequent military thinking. According to this school of thought, the proper way to educate officers is to provide them with correct principles and theory and then train and develop their judgments through constant exercise and experience to ensure that this theory is applied correctly in any given situation.[35]

Based on the contemplation of a host of philosophers such as Copernicus, Galileo, Descartes, and especially Newton, the Enlightenment had an enormous self-confidence in the human mind's ability to grasp the eternal laws that apparently govern every one of us. While Newton reportedly had few problems admitting that he was a dwarf standing on the shoulder of giants, his military contemporaries and immediate successors fiercely denied any important predecessors. Maurice de Saxe's *Reveries on the Art of War*, written in 1732 and

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32   Montecuccoli, "Dell'arte militare" quoted in Rothenberg, "Maurice of Nassau …", p. 63.
33   Martin van Creveld, *The Art of War, War and Military Thought* (London: Cassell, 2000), p. 74.
34   Daniel Moran, "Strategic Theory and the History of War", in *Strategy in the Contemporary World. An Introduction to Strategic Studies*, Baylis, Wirtz, Cohen and Gray (Oxford: Oxford University Press, 2002), p. 21.
35   Gat, *A History of Military Thought*, p. 163.

published posthumously in 1756, has almost become a classic thanks to its sardonic introduction alone:

> This work was not born from a desire to establish a new method of the art of war; I composed it to amuse and instruct myself. War is a science covered with shadows in whose obscurity one cannot move with an assured step. Routine and prejudice, the natural result of ignorance, are its foundation and support. All sciences have principles and rules; war has none. The great captains who have written of it give us none.[36]

One could of course be tempted to believe that war in itself was without laws and regularities, but Maurice's point was that it was the current state of the *art of war* that lacked principles and rules. It was the way of thinking that fell far short of science, not war's ability to be turned into one. Consequently, earlier theorists' failure to capture the hidden principles in for instance Gustavus Adolphus's practice of war, was due to their shortcomings, not Gustavus', as they had "learned only his forms, without regard to principles".[37] In this Maurice foreshadowed the more famous theorist, Jacques de Guibert (1743–90), who stated that it was incorrect methodology that was responsible for the failure of military theory, not the nature of the subject matter itself.[38] This general trend was enhanced by a more particular tendency within military art. The writings of Marshal Sébastien de Vauban (1633–1707), the master of siegecraft in the times of Louis XIV, had shown the enormous potential of the *esprit géométrique* in war.[39] And if the art of fortification and siegecraft could be conducted by an almost mechanical application of military principles, why could it not apply to battle as well?

That war could be governed by "the geometrical spirit" was not as odd as Clausewitz in particular rather mockingly made it sound. Contemporaries of Vauban within a wide range of disciplines actually held that the geometrical spirit could indeed be transferred to domains of knowledge other than mathematics. Baruch de Spinoza (1632–1677) assured us for instance that his *Ethics* was "proved by the geometrical method", and John Locke (1632–1704) included morality in the sciences that was capable of being demonstrated. Even Gottfried von Leibniz (1646–1716), who did see some limitations of the geometrical method, hoped for the possibility that philosophers in the future could

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36   Marshal Maurice de Saxe, *My Reveries on the Art of War* in *Roots of Strategy*, ed. Thomas R. Phillips (Harrisburg: The Military Service Publishing Company, 1940), p. 189.
37   Ibid.
38   Gat, *A History of Military Thought*, p. 49.
39   Ibid., p. 37.

sit down and calculate the truth.[40] So why could not war be based on the geo-metrical method?

The theorist who took the geometric, or early "bellometrician" approach to the extreme, or rather reduced it *ad absurdum*, was the colourful and well travelled Henrich von Bülow (1757–1807), who claimed to have developed a completely geometrical science of strategy.[41] According to Bülow the outcome of any military operation could be predicted unambiguously by the geometric relationship between its objective and its logistic base. Hence, war would virtu-ally disappear. There was no point in waging a war when all belligerents could calculate the outcome beforehand.

The philosopher who drew all the loose threads of the military enlight-enment together into a comprehensive whole was a Swiss bank clerk. Jomini secured his prominent place in the pantheon of military thinkers not by virtue of his originality but by his ability to synthesise and articulate the military common sense of his age.

Jomini established something resembling a Kuhnian paradigm, which to a great extent ended the interschool debate about the fundamentals of military science. The individual theorist could from then on deal with more specific sub-jects and more matter-of-fact themes related to waging war, without establishing them from the ground up each and every time, which could be left to "the writer of textbooks."[42] After Jomini, most military theorists, with Clausewitz as the most prominent exception, more or less implicitly agreed on what a proper mili-tary question was. Hence, Jomini marked the end of the military polymaths and the self-taught entrepreneurial officer. Gradually the military scientist became a profession of its own. Personal combat experience in itself no longer qualified as science. Military theorising became an undertaking of experts who wrote for military students and graduates of the military academies and staff colleges that had opened in the 1770s.[43] As curriculum for military students, Jomini's *The Art of War* was outstanding.[44]

According to the English scientist John Herschel (1792–1871) it is im-portant to distinguish between the "context of discovery" and the "context of justification". How a scientist discovers or develops a theory is completely ex-traneous to its validity: "the procedure used to formulate a theory is strictly ir-relevant to the question of its acceptability. A meticulous inductive ascent and a wild guess are on the same footing if their deductive consequences are confirmed

40 Burke, *A Social History of Knowledge*, p. 204.
41 André Corvisier, *A Dictionary of Military History* (Oxford: Blackwell, 1994), p. 98.
42 Thomas S. Kuhn, *The Structure of Scientific Revolutions* (1962) (Chicago: The University of Chicago Press, 1996), p. 19.
43 van Creveld, *The Art of War*, p. 93.
44 Michael Howard, ed., *The Theory and Practice of War* (1966) (Bloomington: Indiana University Press, 1975), p. 13.

by observation."[45] Hence, the proof of the pudding is in the eating. Whether it was Darwin or for that matter his servant who developed the theory of evolution is completely irrelevant to the theory's ability to explain the descent of man. So, when Marshal Maurice de Saxe warned his readers that he, while ill, had written his book to dissipate his boredom, and that the book "very probably shows the effects of the fever I had",[46] we should not worry. Our concern should be how he defended his ideas, not how he got them. In later years a third concept, "context of use", has evolved that denotes how knowledge is actually used in daily life and problem solving.[47]

Jomini's epistemological model,[48] which bears a noticeable resemblance to Montecuccoli's, can be summed up with a model based on the terminology of John Herschel:
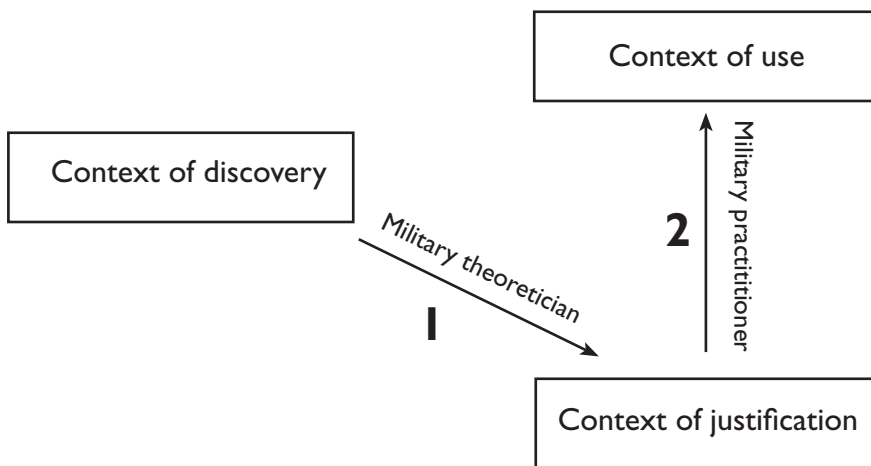

Figure 1: *The classic model of military competence, where practical skills are based on correct application of principles.*

To call the first stage pure science and the second stage applied science would be tempting, but probably incorrect since much of what a military theorist does is applied science, and not "science for the sake of science". However, the main point is that the theorist and the practitioner are different people. One works in the library and fights battles in the seminar rooms, while the man on horseback

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45   John Losee, *A Historical Introduction to the Philosophy of Science*, 4th ed. (Oxford: Oxford University Press, 2001), p. 104.
46   Maurice de Saxe, *Reveries on the Art of War* (1732) (Harrisburg: The Telegraph Press, 1944), p. 1.
47   Bertil Rolf, *Militär kompetens, Traditioners förnyelse 1500–1940* [Military competence. The renewal of traditions 1500–1940] (Nora: Nya Doxa, 1998), p. 125.
48   "Epistemology" or "theory of knowledge" studies the nature and scope of truth, justification and belief.

applies the wisdom of the theorist according to his own judgement of the peculiarities of the situation. According to Jomini, it is the work of the theorist that lays the foundation for victory:

> It is true that theories cannot teach men with mathematical precision what they should do in every possible case; but it is also certain that they will always point out the errors which should be avoided; and this is a highly-important consideration, for these rules thus become, in the hands of skilful generals commanding brave troops, means of almost certain success. The correctness of this statement cannot be denied; and it only remains to be able to discriminate between good rules and bad. In this ability consists the whole of a man's genius for war."[49]

The difficulties of the second stage, of the application, had been known for long, but Jomini had apparently made the first stage scientifically impeccable.

THE COMPETING SCHOOL OF MILITARY THOUGHT – THE CLAUSEWITZIAN LINEAGE

For the *philosophes* of the Enlightenment, war was a machine "reducible, calculable, and subject to universal and immutable principles."[50] Some truly doubted man's ability to grasp the totality of this machine, but for the genuine sceptic the problem was not the shortcomings of the brainpower of the person who observed the machine but the machine itself. Could the peculiarities of war really be reduced to insignificance just as Galileo had eliminated friction from his calculations? In Galileo's ideal world the feather and the cannonball travelled just as fast to the ground. But the immediate experience of the soldier in the field was that it made an enormous difference if you were hit by a cannonball or a feather.

Furthermore, the "military dialectic" caused by the reciprocity between the opponents made certain areas of the art of war genuinely unpredictable. While most of war could be reduced to principles and maxims, a residue was left that could not be captured by theory, not because of any inadequacy in our capacity to contemplate, but because certain areas of war were "quite sublime and residing solely in the head of the general, as depending on time, place and other circumstances, which are eternally varying, so as never to be twice the same in all respects."[51] Contrary to for instance Guibert, both Saxe and Henry Lloyd

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49   Antoine Henri de Jomini, *The Art of War* (1838) (London: Greenhill Books, 1992), p. 323.
50   Faber "The Evolution of Airpower Theory …", p. 49.
51   Paul Gédéon Joly de Maizeroy, *Cours de tactique* quoted in Gat, *A History of Military Thought*, p. 42.

(1729–1783) held that some of the problems of military theory were inherent to the subject matter itself, and not in incorrect methodology.[52]

Even if opposition to the ideas of the Enlightenment is as old as the Enlightenment itself, the first military intellectual to break with the epistemological groundwork of the Enlightenment was Georg Heinrich von Berenhorst (1733–1814):

> [I]f at that moment someone, such as, perhaps, Puységur, had flown above the belligerents in a balloon, he would have said: "I judge according to the principles – the Prussians must be beaten and defeated". But fate was different. The spirit of the army and blind chance carried the day. "The Prussians won in spite of the art."[53]

But what could be the alternatives to military theory based on principles? Berenhorst's problem was that apart from anarchy, he was unable to see any alternatives to a military science based on principles. With due inspiration and help from others, especially Gerhard von Scharnhorst (1755–1813), Carl von Clausewitz, a Prussian with profound military experience on the tactical level of war, did indeed find a way between scepticism and positivism, despite the anachronism of the latter concept.

According to Clausewitz, the conduct of war had traditionally not been "considered a suitable subject for theory, but one that had to be left to natural preference."[54] But with the appearance of siege warfare, and as the reflections on war grew more numerous and "history more sophisticated", an urgent need arose "for principles and rules whereby the controversies that are so normal in military history [...] could be brought to some kind of resolution".[55] Alas, still according to Clausewitz, theorists "soon found out how difficult the subject was, and felt justified in evading the problem by again directing their principles and systems only to physical matters and unilateral activity [and considering] only factors that could be mathematically calculated."[56] The problem with that approach, associated with Jomini and Bülow, was that they left the most important part of war beyond scientific control and outside the realm of theory. To Clausewitz this was a statement of capitulation on behalf of theory:

> Pity the soldier who is supposed to crawl among these scraps of rules, not good enough for genius, which genius can ignore, or laugh at. No; what genius does

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52   Gat, *A History of Military Thought*, p. 74
53   Berenhorst, *Betrachtungen* quoted in Gat, *A History of Military Thought*, p. 155.
54   Clausewitz, *On War* (1976), p. 134.
55   Ibid.
56   Ibid.

is the best rule, and theory can do no better than show how and why this should be the case. Pity the theory that conflicts with reason.[57]

The most difficult part of military theory, the one that Bülow and Jomini purportedly avoided, was war's "moral factors". First of all, moral factors included feelings, i.e. deeply human traits such as hatred, fear and courage. Secondly they included positive reaction; or *lebendige Reaktion*, in German, pointing to the fact that "the very nature of interaction is bound to make it unpredictable."[58] The enemy will always try to outsmart us. The third element was the uncertainty of all information, or the fog of war. The lack of objective knowledge compelled the commander to trust his talent or luck. Consequently, it was impossible to "construct a model for the art of war that can serve as a scaffolding on which the commander can rely for support at any time."[59] A positive doctrine, or in Clausewitz's own words, *Eine positive Lehre*, seemed unattainable.

Clausewitz pointed out two different ways out of these epistemological difficulties. The first way was the most straightforward. Clausewitz claimed that the problems identified above did not apply equally to all levels of war. The more physical and practical the activity was, the fewer difficulties there would be. Consequently "tactics will present far fewer difficulties to the theorists than will strategy."[60] For the sake of later arguments, we have to underscore that even on the tactical level some epistemological challenges will remain, which can be illustrated by a simple model:
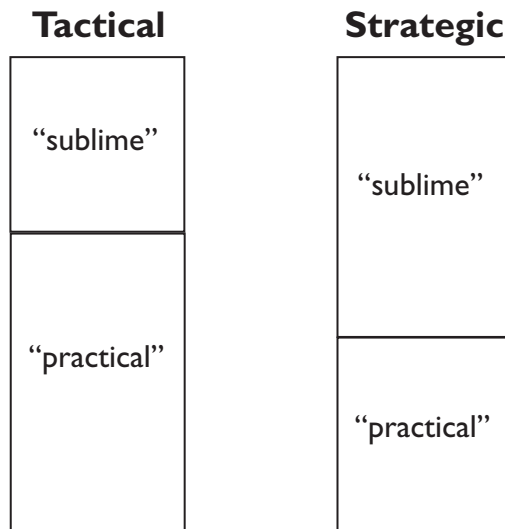

Figure 2: *Both the tactical and the strategic levels of war have "sublime" and "practical" elements. The sublime element is genuinely unpredictable due to "moral factors", while practical elements can be subsumed under laws.*

57   Ibid., p. 136.
58   Ibid., p. 139.
59   Ibid., p. 140.
60   Ibid., p. 141.

Clausewitz's solution to the epistemic problems that remained at the "sublime level" of both the strategic and tactical levels of war is more intriguing because it throws Jomini's statement that it only remains for the commander to "discriminate between good rules and bad" into serious doubt. This solution represents the great schism in military epistemology, as theory is no longer seen as a manual for action, but a manual for thinking, so to speak: "Theory should be study, not doctrine", or in German, »Die Theorie soll eine Betrachtung und keine Lehre sein«.[61] In other words

> theory then becomes a guide to anyone who wants to learn about war from books; it will light his way, ease his progress, train his judgement, and help him to avoid pitfalls […]It is meant to educate the mind of the future commander, or, more accurately, to guide him in his self education, not to accompany him to the battlefield; just as a wise teacher guides and stimulates a young man's intellectual development, but is careful not to lead him by the hand for the rest of his life.[62]

The concept of "self education" was not restricted to Clausewitz. It was for instance central to Wilhelm von Humboldt, a contemporary of Clausewitz, in his reformation of the University of Berlin.[63] It was a fundamental part of *Bildung,* or "self-cultivation",[64] the key word of the era. *Bildung*, in line with Clausewitz, implied a "distrust of instrumental or 'utilitarian' forms of knowledge."[65] Knowledge had to work through an "educated mind".

Theory does not equip the commander with "formulas for solving problems" but gives him insight into "the great mass of phenomena and their relationships" so that his creative mind is free to "rise into the higher realms of action."[66] In this way Clausewitz undermined the division of labour between theorists and practitioners. The commander had not only to apply approved principles, i.e. the "doctrine", in a given context, as Jomini prescribed, but he sometimes had to develop those principles himself. The commander thus resembles an artist, as described in Immanuel Kant's aesthetics in *Kritik der Urteilskraft* from 1790.

To sum up: Clausewitz split military theory. One part dealt with practical and material topics and was similar to theory in architecture where the

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61 Carl von Clausewitz, *Vom Kriege* (Berlin: Ferdinand Dümmler, 1832), p. 128.
62 Clausewitz, *On War* (1976), p. 141.
63 Sven-Eric Liedman, *I skuggan av framtiden* [In the shadow of the future] (1997) (Stockholm: Albert Bonniers Förlag, 1999), p. 235.
64 Fritz Ringer, *Fields of Knowledge, French academic culture in comparative perspective 1890–1920* (Cambridge: Cambridge University Press, 1992), p. 304.
65 Ibid., p. 2.
66 Clausewitz, *On War* (1976), p. 578.

practitioner mainly used his determinate judgement to subsume concrete cases to known laws. But in some areas of military activity, especially in strategy and in the higher echelons, there were no such laws available. The practitioner had to make his own law for the case at hand using his *reflective judgement*. In the following we will look somewhat more deeply into the epistemology of this "sublime" part of military theory.

The sublime part of military theory can also be divided in two. One part deals with actual battles in the field, while the other deals with the battles in the headquarters or debating clubs. The first part may be called *theories-in-use*, the other *espoused theories*.[67] The first need not be formulated because it is used by the originator himself. Through self-education, as mentioned above, the practitioner can do everything right without being able to explain why: "All great commanders have acted on instinct."[68] This is mainly associated with the non-technical and non-trivial elements on the tactical level of war. But if you have to work through others, as most generals also have to do, your ideas have to stand closer scrutiny, they have to be espoused: "Yet when it is not a question of acting oneself but of persuading others in discussion, the need is for clear ideas and the ability to show their connection with each other." [69] This was a particular important point for Clausewitz, regardless of its direct utility on the battlefield. Almost like Descartes, Clausewitz was profoundly fed up with idle talk, or the "futile bandying of words".[70] What was needed was a "scientific theory for the art of war", or *philosophischer Aufbau der Kriegskunst*, both to impede talkative dilatants and to persuade others.[71] The latter ability is mainly associated with the strategic level of war. The difference explained above can also be illustrated by a simple figure:

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67   Chris Argyris and Donald A. Schön, *Theory in Practice: Increasing professional effectiveness* (London: Jossey-Bass, 1974), p. viii.
68   Clausewitz, "Unfinished Note", in *On War* (1976), p. 71.
69   Ibid., p. 71.
70   Ibid.
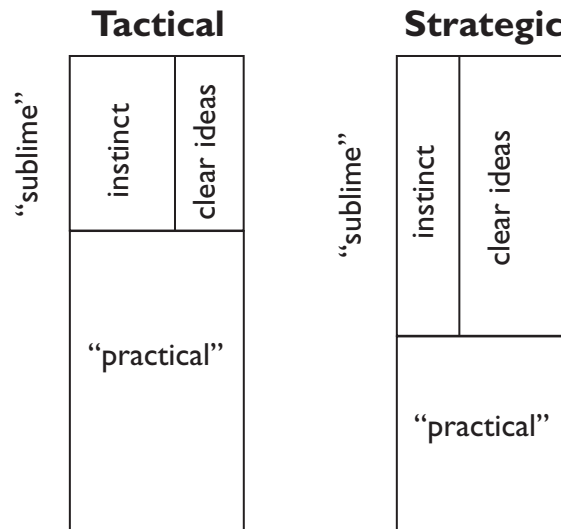71   Clausewitz, *Vom Kriege* (1832), p. xxi.

Tactical   **Strategic**

Figure with two column diagrams labeled "sublime", containing "instinct", "clear ideas", and "practical".

Figure 3: *To cope with the sublime elements of war the practitioner needs "instinct" or theory-in-use. If he also works through others, as most officers do, he also needs to convey "clear ideas" or espoused theory.*

The epistemological foundations of Clausewitz's theory-in-use, i.e. "the instinct", and espoused theory, i.e. "clear ideas", are not the same. Regarding instinct, the commander should pay attention to what actually works, and should not be too embarrassed if he could not explain exactly *why* it worked. Indeed, it was of little value to study the military officers who reached the top since "they rarely analyse[d] their art."[72] It was a theory's "cash value" in practical terms that mattered, not what theorists said ought to work. It was the actual outcome that proved a theory, not arguments. In this Clausewitz resembles pragmatism. A statement is true because it works, not the other way around.

The other strand of Clausewitz's theory, most associated with the strategic level of war, was not meant for practitioners in the field but for "persuading others in discussion". Here Clausewitz's epistemology looks more like hermeneutics in the humanities. Additionally, as we will see below, on this level of war the distance between the practitioners and the theorists is considerably less than is supposed in the Jominian paradigm. The problem, according to Clausewitz, was not that people developed wrong ideas but that they failed to submit them to proper testing. Testing hypotheses through history demanded that the military theorist knew history thoroughly and did not bend history to his own needs, as

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72   Hugh Smith, *On Clausewitz, A Study of Military and Political Ideas* (New York: Palgrave, 2005), p. 158.

had often been the case.[73] Occasionally the available historical data may be insufficient to provide material for the theorist. This may be compensated by adding new historical cases, and substituting quality for quantity. But again, that expedient is clearly dangerous and "frequently misused."[74] If theory loses contact with reality the result may be disheartening: "What is the practical value of these obscure, partially false, confused and arbitrary notions? Very little – so little that they have made theory, from its beginnings, the very opposite of practice, and not infrequently the laughing stock of men whose military competence is beyond dispute."[75]

Clausewitz was cautious not to step into this quagmire himself. For instance he wrote a lot more about military history than he did about military theory. He sincerely tried to find out what had "actually happened" rather than just pick the first cherry he could find to support his hypothesis. Furthermore, unlike most of his colleagues, he once in a while laid down his arms and surrendered: "We admit, in short, that in this chapter we cannot formulate any principles, rules, or methods: history does not provide a basis for them. On the contrary, at almost every turn one finds peculiar features that are often incomprehensible, and sometimes astonishingly odd."[76] And if the thread of his conceptual web became too thin he "preferred to break it off and go back to the relevant phenomena of experience. Just as some plants bear fruit only if they do not shoot up too high, so in the practical arts the leaves and flowers of theory must be pruned and the plant kept close to its proper soil – experience."[77] As a conclusion, theory and experience have to support each other like two "spans of an arch".[78] The one can not substitute the other. Military theory rests on *both* the experience and nature of war.

Clausewitz was no anti-intellectual refuting the value of books, but he warned against over reliance on them. You could learn from books, but not everything, and not without a "working theory".[79] Books and theory were a poor, but often necessary, substitute for personal experience of war. Hence, the following sentences are the most important of all regarding military theory in *On War*:

> Critical analysis, after all, is nothing but thinking that should precede the action.
> We therefore consider it essential that the language of criticism should have the

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73   Clausewitz, *On War* (1976), p. 164.
74   Ibid., p. 172.
75   Ibid., p. 169.
76   Ibid., p. 517.
77   Clausewitz, "To an Unpublished Manuscript on the Theory of War, Written between 1816 and 1818" in, *On War* (1976), p. 61.
78   Ibid.
79   Clausewitz, *On War* (1976), p. 157.

same character as thinking must have in wars; otherwise it loses its practical value and criticism would lose contact with its subject.[80]

To push it a bit further: language, thinking and method are the same for both decision making and theory-making. Practice in the first will help you in the latter, and vice versa. Furthermore, the study of history is vital for both. The theorists use it as a testing ground for hypotheses, and future commanders use it as a training ground for decision making: "While history may yield no formula, it does provide an *exercise for judgement* here as everywhere else."[81] In the absence of personal experience, books can be the shooting range of the mind to build valid and robust intuition and mental models. In this, Clausewitz in fact foreshadowed an important message in Hans-George Gadamer's hermeneutic: "The dialectic of experience has its proper fulfilment not in definitive knowledge but in the openness to experience that is made possible by experience itself."[82]

In other words: you may gain experience by reading books. You will not become a decorated veteran by it, but you may become a better "experiencer", adding to your "experience awareness". Furthermore, filtering experience through theory would add depth and meaning to the experience. A mule without theory would gain little from the experience of 20 campaigns.

The main contribution of theories and academic systems are to mould our way of thinking, not guide our way of acting. Theory's approach to practice is indirect, not direct. Or in the words of Raymond Aron: "Clausewitz was theorist of an art to be cultivated by study and reflection, one that cannot be learned. He inspired, rather than instructed."[83]

So while the Jominian theoretical landscape was rather one-dimensional, the military theory of Clausewitz can be illustrated by a more complicated model shown on the next page:

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80   Ibid., p. 168.
81   Ibid., p. 517.
82   Hans-Georg Gadamer, *Truth and Method* (2. ed. 1960) (New York: Continuum, 1998), p. 355.
83   Raymond Aron, *Clausewitz, Philosopher of War* (London: Routledge & Kegan Paul, 1983), p. 237.
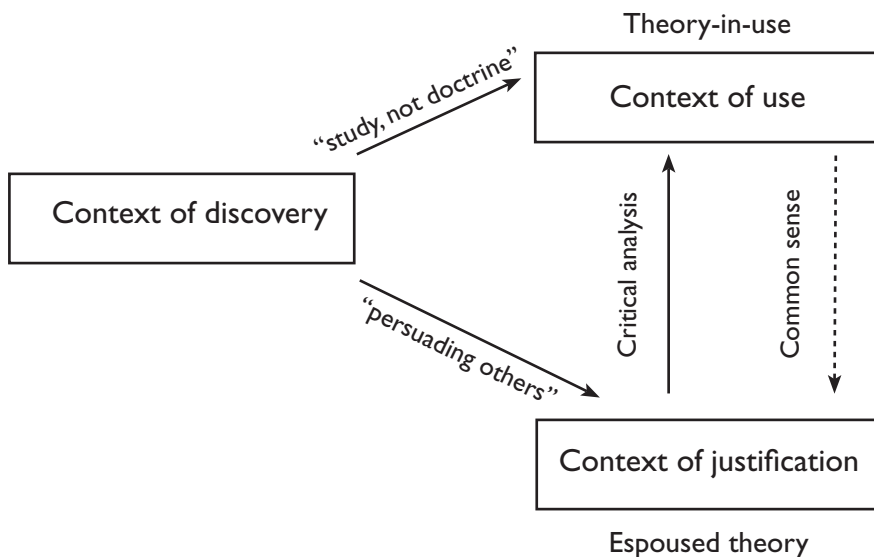
Figure 4: *The Clausewitzian model of military competence within the sublime element of war, where skills are based on a reflective interaction between "instincts" i.e. theory-in-use and "clear ideas" i.e. espoused theory.*

A hypothesis, popping up in the context of discovery, can travel two ways. It can either go directly to the practitioner, mainly on the tactical level, as the idea pops up in his own head. The practitioner should not worry too much about why it works, only *what* works. The other way, the indirect one, is when the hypothesis pops up in the head of a commander or a theorist, who must worry about *why* it works as well, if he wants to influence others. Thereafter, theory-in-use and espoused theory will influence each other reciprocally, through critical analysis and common sense.

THE SYNERGETIC OFFSPRING

It is tempting to see Jomini and Clausewitz's approaches to military theory as competitors, as two alternative ways to look at reality, one better than the other. But that need not be the case, even if that was the way both Jomini and Clausewitz saw it, and subsequently how most of their successors have seen it: "An analytical comparison of the works of Jomini and Clausewitz confirms the superiority of the former."[84]

Jomini and Clausewitz are better taken together than alone. Instead of seeing Clausewitz's work as an antithesis to Jomini's, the combination of

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84 A.N. Mertsalov, "Jomini versus Clausewitz", in *Russia – War, Peace and Diplomacy*, eds Ljubica and Mark Erickson (London: Weidenfeld & Nicolson, 2004), p. 15.

the two constitutes a viable synthesis of operational military thinking. Jomini's epistemological model may profitably be seen as the way non-experts make decisions and solve problems, while Clausewitz epistemological model can be seen as the way experts approach problems. Jomini's preoccupation with rules and Clausewitz scepticism towards the value of the same are in fact compatible, but perhaps in the opposite direction of what both Jomini and Clausewitz assumed: "One must be prepared to abandon the traditional view that a beginner starts with specific cases and, as he becomes more proficient, abstracts and interiorises more and more sophisticated rules. It might turn out that skill acquisition moves in just the opposite direction: from abstract rules to particular cases."[85]

It is the novice who needs rules and heuristic knowledge of how to apply them. A person learning to drive a car needs rules for when to shift gear, an expert driver does not: "Proficiency seems to develop if, and only if, experience is assimilated in this atheoretical way and intuitive behaviour replaces reasoned responses."[86] Hence, an expert may muster an "intuitive situational response" where he sees *how* to achieve a goal almost simultaneously as he sees *what* needs to be achieved.[87] In military matters during Clausewitz's era, this kind of the professional judgement of military commanders was called *coup d'oeil*. The commander could see what needed to be done without resorting to explicit rules. He did not need to think, or to use Ferdinand Foch's words, he act "correctly without having to reason".[88] And more importantly, if you ask an expert to explain the rules he apparently uses, he is forced to "regress to the level of a beginner and state the rules he still remembers but no longer uses."[89] So when Clausewitz stated that "rules are not only made for idiots, but are idiotic in themselves", he was too heavy handed.[90] The amateur needs rules, the expert does not: "The expert is simply not following any rules!"[91] Furthermore, in war most people are amateurs, at least initially. Military experts cannot, unlike for instance medical experts, practise on real life cases continuously. Hence, rule following is perhaps even more important in military matters than elsewhere. And these rules Jomini was prepared to give.

85   Hubert L. Dreyfus and Stuart E. Dreyfus, "From Socrates to Expert Systems: The Limits of Calculative rationality", in *Philosophy and Technology II, Information Technology and Computers in Theory and Practice*, eds Carl Mitcham and Alois Huning (Dordrect: D. Reidel Publishing Company, 1986), p. 115.

86   Hubert L. Dreyfus and Stuart E. Dreyfus "From Socrates to Expert Systems: The Limits and dangers of Calculative rationality" (The Department of Philosophy, University of Berkely [online 13 April 2007]).

87   Ibid.

88   Marshall Ferdinand Foch, *The Principles of War* (1903) (London: Chapman & Hall, 1920), p. 11.

89   Dreyfus and Dreyfus, "From Socrates to Expert Systems", p. 121.

90   Clausewitz, *On War* (1976), p. 184.

91   Dreyfus and Dreyfus, "From Socrates to Expert Systems", p. 121.

That these two levels of military competence were hard to distinguish is amply illustrated by General Friedrich von Bernhardi (1849–1930) who apparently tried to combine the best from both the Jominian "fundamental principles school" and the Clausewitzian "concrete case school":

> We must rather remain constantly aware that from such constancy nothing but general principles and norms of acting can be deduced which nowhere restrict freedom of action, and, in so far as they are not of a nature to apply generally, must in their application always appear in different forms in compliance with the changes in armaments and in the conduct of war.[92]

The question is of course how much principles and norms can change before they are no longer the same principles and norms. This qualm seems irresolvable, and is apparently still with us. NATO for instance, defines doctrine as "fundamental principles by which the military forces guide their actions in support of objectives. It is authoritative but requires judgement in application."[93] What does the last sentence really imply in practice? A combination of Jomini and Clausewitz solves the dilemma. Rules are for the novice and for the proficient, but the real expert needs none.

Furthermore, on the practical or tactical level of war, things can indeed become very complicated. To supply and coordinate huge armies need a certain amount of professional skill, supported by rules and principles. But at the strategic and political level of war the difficulties are of another kind: "The conduct of war itself is without doubt very difficult. But the difficulty is not that erudition and great genius are necessary to understand the basic principles of warfare. These principles are within the reach of any well-organised mind, which is unprejudiced and not entirely unfamiliar with the subject."[94] The difficulties on this level of war are of a more political, moral and psychological character, which are traits needed to surmount the "tremendous friction" that hampers any military operation.

Jomini's paradigm is still the reigning model of proper military thinking, but his legacy is quite easily overlooked because his principles were often specific and two-dimensional, in the sense that they mainly dealt with topics such as line of operations and the turning of fronts. But the important part of Jomini's legacy, i.e. the belief in principles, as indicated by the NATO definition

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92   From Friedrich von Bernhardi, *On War of Today* quoted in John I. Alger, *The Quest for Victory, The History of the Principles of War* (Westport: Greenwood Press, 1982), p. 98.
93   NATO, *Glossary of Terms and Definitions*, AAP-6.
94   Carl von Clausewitz, *Principles of War* (1812, trans. 1942) (Mineola: Dover, 2003), p. 60.

above, is indisputable, although indirect. Jomini lives on, not in the contents of his advice, but in the established belief in the principles of war. Clausewitz, on the other hand, lives on because his insistence that at a certain level of proficiency and responsibility, the military practitioner has to leave those principles behind.

This is not the place to elaborate further on Jomini's and Clausewitz's enduring relevance. Instead, we will round off this chapter by calling attention to the "exterior" aspects of military theory.

MILITARY THEORY AS VEHICLE OF EXPRESSION

According to Sir Julian Corbett, the main reason behind the mistrust of military theory is that people expect wrong things from it: "Theory is, in fact, a question of education and deliberation, and not of execution at all."[95] Theory is not a substitute for experience and judgement, but fertiliser for them both.[96] Like Clausewitz, Corbett points to several aspects of theory's practical value. First of all, theory "can assist a capable man to acquire a broad outlook whereby he may be the surer his plan shall cover all the ground, and whereby he may with greater rapidity and certainty seize all the factors of a sudden situation."[97] Secondly, theory is there to ensure that the commander's words have "the same meaning for all" and "awake in every brain the same process of thought".[98] Previous military catastrophes had occasionally been caused by the fact that the commander's conception had been "unintelligible to anybody but himself."[99] Thirdly, and most important in this context, theory enables a learned discussion between the commander and his political chiefs, to find a viable balance between political ends and military means. Especially in an empire like the British, where Corbett lived, the ability to negotiate between different interests, services and other powers was paramount:

> Conference is always necessary, and for conference to succeed there must be a common vehicle of expression and a common plane of thought. It is for this essential preparation that theoretical study alone can provide; and herein lies its practical value for all who aspire to the higher responsibilities of the Imperial service.[100]

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95 Corbett, *Some Principles of Maritime Strategy* (1911), p. 3.
96 Ibid., p. 8.
97 Ibid., p. 2.
98 Ibid.
99 Ibid., p. 3.
100 Ibid., p. 5.

Neither the importance of conferences, nor the frequency of them has decreased since the days of Corbett. Hence, the ability to be both unambiguous and deliberately ambiguous according to the situation still seems like a valuable military skill. Indeed, the main military problem in our part of the world seems to be the dialogue between the military experts and the political masters. It is important to underscore that even if the dialogue between the civilian leadership and officers is unequal, in the sense that politicians have the right to make the final decisions, it is important that this unequal dialogue does not degenerate into a political monologue or a dialogue of the deaf. Politicians have to be informed of the limitations of military means, as underscored by Clausewitz: "War in general, and the commander in any specific instance, is entitled to require that the trend and designs of policy shall not be inconsistent with these [military] means."[101] Furthermore, the unequal dialogue implies that war may modify political aims, and that it often does in fact. Hence, political caution is of paramount value: "For a politician to dictate military action is almost always folly. Civil-military relations must thus be a dialogue of unequals and the degree of civilian intervention in military matters a question of prudence[.]"[102] Even in peace, political ambitions ought not to outstrip the carrying power of military means: "Strategy can be salvaged more often if peacetime planning gives as much consideration to limiting the range of ends as to expanding the menu of means."[103] To get a viable equilibrium between the political desire and the military capacity, it is important that the two spheres meet on an equal level: "The principle we need to embrace is that of civil-military integration, founded on the notions of equality in counsel and harmonisation of effects."[104] Well founded military theory will be important to lubricate this exchange of views.

FINAL IMPLICATIONS

In this essay we started out by looking at two different and well commented strands of military theory-making, i.e. the Jominian lineage of military theory, emphasising eternal principles of war, and the Clausewitzian lineage, which rejects reification and the ensuing ossification of heuristic rules and principles and preaches the importance of the commander's personality and character, and of pragmatism in any situation, because any situation is unique. Then the essay took a more unconventional turn and argued that the Jominian and Clausewitzian lineage are not mutually exclusive, but mutually enriching. Jomini wrote for

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101   Clausewitz, *On War* (1976), p. 87.
102   Eliot A. Cohen, *Supreme Command, Soldier, Statesmen and Leadership in Wartime* (New York: The Free Press, 2002), p. 12.
103   Richard K. Betts, "Is strategy an Illusion?" *International Security*, vol. 25, no. 2, Fall (2000): 50.
104   Hew Strachan, "Making Strategy: Civil-Military relations after Iraq" *Survival*, vol. 48, no. 3 (2006): 76.

people without much experience of war, which is for the most time the great majority of officers, while Clausewitz wrote for the genuine expert and the man at the top.

With a little help from Julian Corbett, the essay took military theory a bit further. Military theory is still important for military practitioners, in the combined Jominian/Clausewitzian approach as depicted above, but it is also important outside the military realm. As Clausewitz emphasised, politicians should not ask for something the military is unable to deliver, and according to Corbett, military theory is an important facilitator of a dialogue of the possible. For instance, prior to the invasion of Iraq in 2003, certain military planners knew quite well what could happen in the phase following the major combat operations, but the warnings did not ring through.[105] Indeed, it was not necessarily the generals' inability to convince the politicians that was the problem but the politicians' inability to comprehend. Nevertheless, military theory as a tool for forming "clear ideas" and a "vehicle of expression" could obviously have been of great help, adding weight to the power of the best argument.

In Shakespeare's *King John*, the king regrets a murder, and blames his courtier: "Hadst thou but shook thy head or made a pause. When I spoke darkly what I purposed, Or turned an eye of doubt upon my face, As bid me tell my tale in expressed words[.]"[106] When it comes to preparing for war, everyone has an obligation to demand expressed words, which, and that is the main message of this essay, military theory should assist. If unable to formulate the political intentions in plain words, the war is probably inadvisable. This is of course no panacea, but it would ensure that the road to disaster does not go via gullibility and wishful thinking:

> No one starts a war – or rather, no one in his senses *ought to do so* – without first being clear in his mind what he intends to achieve by that war and how he intends to conduct it.[107]

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105 Ibid.: 63.
106 Quoted in Michael Walzer, *Just and Unjust Wars* (New York: Basic Books, 1992), p. 296.
107 Clausewitz, *On War* (1976), p. 579. (Italics added.)

Part II: New Wars: Characteristics and Commonalities

WHAT IS REALLY NEW ABOUT THE NEW WARS?
– A REPLY TO THE CRITICS

by Herfried Münkler

Quite some time has passed before conflict studies and peace studies, paralysed in a rut, reacted to the concept of new wars and scholars of international relations realised that the law of democratic peace they so emphatically advocated did not cover the challenges that war presented at the end of the twentieth and the beginning of the twenty-first century. Perhaps this is the reason why current charges against the concept of new wars are all the more fierce. Above all four objections are raised: Firstly, it is said that what is labelled as *new* is in fact not new at all but could be observed to accompany war all along. Then the counterconcept of *old wars* is criticised as Eurocentric and as ignoring the question of European colonial warfare outside Europe. Thirdly, it is objected to that the concept of new wars also glosses over the continuing nuclear threat and overrates the importance of terrorism in world politics. Finally, it is feared that the concept of new wars smoothes the way for an anthropologising of the general concept of war and thereby causes a regression far behind the idea of politically controlled warfare as well as narrowing the focus only to some isolated phenomena of war.[108]

There are a number of well warranted points in these objections. Yet they very rarely affect the concept of new wars as such, but instead some of its

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108 This criticism has been made to different effect: cautiously by Wolfgang Knöbl, „Krieg, ‚neue Kriege' und Terror: Sozialwissenschaftliche Analysen und ‚Deutungen' der aktuellen weltpolitischen Lage" [War, ”New Wars" and Terror: Social Science Analyses and Interpretations of Contemporary Global Politics], *Soziologische Revue*, vol. 27 (2004): 186–200; with utmost vigour by Martin Kahl and Ulrich Teusch, „Sind die ‚neuen Kriege' wirklich neu?", *Leviathan*, vol. 32, no. 3 (2004): 382–401; approvingly by Michael Brzoska, "'New War' Discourse in Germany"; *Peace Research*, vol. 41, no. 1 (2004): 107–117, and Monika Heupel and Bernd Zangl, „Von ‚alten' und ‚neuen' Kriegen – Zum Gestaltwandel kriegerischer Gewalt" [On "Old" and ”New" Wars – the New Shape of Belligerency], *Politische Vierteljahresschrift*, vol. 45, no. 3 (2004): 346–369.

advocates while not others. That the concept's critics would have gone to any length to group its advocates and systematically organise the arguments in the first place is hardly recognizable. John Keegan, for example, neither made use of the concept of new wars itself nor did he make any contributions to its analytical conceptualisation.[109] Paradoxically though, Keegan is time and again referred to as an advocate of the concept of new wars, or the concept is often criticised in response to Keegan's work. Martin van Creveld, in comparison, has long spoken of a "transformation of war" and predicted the replacement of large-scale, inter-state wars by "low intensity wars".[110] Van Creveld has thus advanced the thesis that Clausewitz' theory of war is no longer of any use and should be discarded. This aversion to Clausewitz joins both van Creveld and John Keegan. Keegan, in keeping with his teacher Basil Liddell Hart, never had much sympathy with the Prussian theorist of war.[111] But whereas van Creveld derives the obsolescence of Clausewitz' theory from his own description of the transformation of war, Keegan holds that Clausewitz' theory was never well suited to explaining the earlier wars. The theory, according to Keegan, has always been wrong. Both of these criticisms of Clausewitz need to be clearly distinguished from each other which is something the critics of the concept of new wars rarely succeed in doing. The reason for this is simple: They are often little familiar with Clausewitz' work. This deficiency has far-reaching consequences that concern far more than a mere confusion of what are in fact very different objections to Clausewitz' theory.[112]

Mary Kaldor was one of the very first to differentiate between old and new wars, a distinction she developed against the background of the Yugoslav wars of state-disintegration.[113] Yet Kaldor did not devise a *theoretical* model of the new wars which would differentiate them from the old ones. Although she describes the differences between new and old wars and also names features of the new wars, they are not conceptualised in a general theory. In fact, I first elaborated such a theory and isolated three general characteristics of new wars:

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109 Cf. John Keegan, *A History of Warfare* (New York: Alfred A. Knopf, 1993) where war is described not so much as an instrument of politics but rather as a specific form of life and code of honour. Important for the concept of new wars is John Keegan, *The Mask of Command* (New York: Penguin, 1987) which distinguishes between heroic, un-heroic and post-heroic military command.
110 Martin van Creveld, *The Transformation of War* (New York: Macmillian, 1991).
111 See Aron, *Clausewitz, Philosopher of War*, pp. 286–288.
112 For an outline of problems and challenges in reading Clausewitz, see Herfried Münkler, *Über den Krieg. Stationen der Kriegsgeschichte im Spiegel ihrer theoretischen Reflexion* [On War. Stages in the History of Warfare as Reflected in Theory] (Weilerswist: Velbrück, 2002), pp. 75–148.
113 Mary Kaldor, *New and Old wars: organized violence in a global era* (Stanford: Stanford University Press, 1999).

- The gradual *privatisation of war* meaning that states are no longer the monopolists of war.[114] In actual fact, this might never have been fully the case but regarding international rules of war as well as international politics, this assumption proved very workable. However, this is no longer the case. Non- and sub-state actors have increasingly seized the initiative from states that, for the most part, have been reduced to reactive positions.

- The development of insurmountable military asymmetry and, in reaction to it, the *asymmetricalisation or war* by militarily inferior actors otherwise hardly fit for battle.[115] To understand this dimension well, it is necessary to survey the history of both the military and war. Such a survey clearly shows that it is not symmetry but asymmetry that is the standard condition of war to be expected and against which a symmetrical order was set up by political means.

- The *demilitarisation of war*: regular armed forces have lost both the control and monopoly of warfare.[116] This can be seen from the diversity of players and their objectives. An increasingly colourful mix of combatants, not regular armies, are predominant; their targets are rarely genuinely military ones but increasingly so the civilian population and non-military infrastructure in general. The consequence lies in the dissolution of the clear distinction between combatants and non-combatants that had been one of the most important achievements of European rules of war.

The concept of new wars is based on the assumption that these changes are closely interlinked and that neither can be adequately understood and described if ignoring the others. It is precisely the temporal coincidence of all three characteristics which constitutes the substantially new feature of the new wars. On its own, each of these characteristics could already be observed in earlier times. This is the reason that prompts well justified objections to labelling as new certain single features that are in fact well known throughout the history of war. But, at the same time, this misses the core of the concept: the new feature of the new wars lies in the simultaneous coincidence of all of the three main features described above.

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114 Herfried Münkler, *The New Wars* (Oxford: Polity, 2005), p. 16, and *Der Wandel des Krieges. Von der Symmetrie zur Asymmetrie* [The Changing Face of War. From Symmetry to Asymmetry] (Weilerswist: Velbrück, 2006).

115 Münkler, *The New Wars*, pp. 25 and 66, see also Münkler, *Der Wandel des Krieges*, p. 137.

116 Münkler, *The New Wars*, p. 81.

The end of the East-West conflict was accompanied by widespread expectations that from then on war and the threat of war would belong to the past and mankind would finally realise its age-old dream of lasting, if not perpetual, peace and thereby soon pocket a considerable peace dividend by reducing defence budgets. These expectations endorsed prognoses by numerous social scholars, from Auguste Comte to Joseph Schumpeter, who understood the orientation to war and military affairs as the disposition of an élite which they thought would gradually disappear with the development of industrialisation and capitalism. Immanuel Kant's essay *Perpetual Peace* is based on the idea that the spirit of commerce is incompatible with war and "sooner or later gains the upper hand in every state." After the development had been blocked by nationalism and totalitarianism, tendencies leading to the disappearance of war, at least this was expected by many in the beginning 1990s, would henceforth take effect.[117]

This, of course, was a delusion. What was coming to an end was the era of conventional interstate war, not war itself. Interstate wars had become impossible above all as a result of technological developments – on the one hand due to the immense destructive power of nuclear weapons and on the other hand as a result of the dramatically increased vulnerability of modern industrial and service economies.[118] Both things together resulted in the costs of interstate wars by far outweighing the gains that could be expected and, therefore, such wars lost their attractiveness, not only as advantageous opportunities for forceful expansion and acquisition but also as a feasible way of political problem solving. This, again, was not necessarily a new discovery. Even at the end of the nineteenth century a number of very different observers, among them Prussian chief of staff Helmuth von Moltke, Polish banker and publicist Johann von Bloch and the German-English industrialist and revolutionary Friedrich Engels, reached the conclusion that a war fought in Europe would yield immense and revolutionary social and political outcomes throughout the continent.[119] The First World War brought just this, and in some ways Europe was working to deal with and clear away the consequences of the "seminal catastrophe of the twentieth century" (George Kennan) well into the 1990s. The Europeans, to prevent the recurrence of such catastrophe, took a number of precautions after World War II, including the European Coal and Steel Community and the European Economic Community (EEC), both helping to break down political and economic barriers, and the Conference on Security and Cooperation in Europe (CSCE). With the transfor-

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117 For a detailed account see Münkler, *Der Wandel des Krieges*, p. 112.
118 This aspect has been much emphasised by van Creveld, *The Transformation of War*. That these developments would make guerrilla war increasingly attractive was already noticed early on, see for example Otto Heilbrunn, *Partisan Warfare* (London: George Allen & Unwin, 1962), p. 140.
119 Münkler, *Über den Krieg*, pp. 128, 149.

mation of the EC into the European Union (EU), its eastwards expansion, and the transformation of the CSCE into the OSCE, the security regimes emancipated themselves from Cold War conditions and have since formed the foundations of the political and economic order of Europe. This order guarantees with nigh certainty that war will no longer be an instrument of European politics.[120] And indeed, at the beginning of the 1990s European states, by reducing defence budgets, received considerable peace dividends.

Yet this process of debellisation could not be globally exported, it did not even cover the whole of Europe itself but left out its south-eastern flank, the Balkans. By the mid-1990s at the latest, hopes had varnished that the end of the East-West conflict would also bring the end of war. In the meantime a number of wars had taken place which, though not wars in the conventional sense, were marked by an enormous degree of violence and far-reaching consequences.[121] *First*, there is the Gulf war of 1990–91 in which Iraqi forces occupied Kuwait, then annexed it and were finally driven out by an UN-mandated and US-led military coalition reinstating the previous Kuwaiti regime. *Second*, there are the Yugoslav wars of disintegration of which the one in Slovenia was the shortest and involved the least bloodshed. While the war between Serbs and Croats had already been accompanied by massacres and ethnical cleansing, the Bosnian war finally lead to an excess of violence, above all against the civilian population that profoundly shook the confidence in a progressing policy of peace throughout Europe. More than anything else, the war in Bosnia choked European confidence in diplomatic negotiations and financial incentives as central means of replacing the use of military force. In the end, it was US air strikes and the subsequent 1995 Dayton peace accord that ended the Bosnian war. To avoid repetition of the atrocities in Kosovo, NATO decided on a military intervention on an unprecedented scale. Several weeks of air strikes at military and infrastructural targets forced the Serbian army and police forces to retreat from Kosovo which was then made a protectorate of both NATO and the European Union. *Third* and finally there are the wars in Somalia and Rwanda – of course these are but two examples of many more. In Somalia an UN-mandated military intervention

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120 In his *The Breaking of Nations. Order and Chaos in the Twenty-First Century* (London: Atlantic, 2003), p. 26, Robert Cooper described the European constellation as a "postmodern world", which he contrasted with the pre-modern and modern world. The modern world is that of classical nation states rivalling for power and influence and for whom war is a means of politics (see John Mearsheimer, *The Tragedy of Great Power Politics* (New York/London: W.W. Norton, 2001), p. 29.). The pre-modern world is one of de-statisation and "new wars", see also Ulrich Menzel, *Paradoxien der neuen Weltordnung* [The Paradoxes of the New World Order] (Frankfurt/M.: Suhrkamp Verlag KG, 2004), p. 93.

121 For a summary of this development including statically processes data see Wolfgang Schreiber, „Die Kriege in der zweiten Hälfte des 20. Jahrhunderts und danach" [The Wars of the Second Half of the 20th Century – and After] in *Das Kriegsgeschehen 2000*, eds Th. Rabehl and W. Schreiber (Wiesbaden: VS Verlag, 2001), pp. 11–46.

could not end the civil war and, in fact, failed dramatically whereas in Rwanda UN and then OAU (Organisation of African Unity) stood by and watched a genocide in which roughly 800,000 people were killed.[122]

War, thus, had not disappeared at all with the end of the East-West conflict but had merely changed appearance. In *On War* Carl von Clausewitz described war as a chameleon which incessantly adapts itself to existing conditions.[123] The de-statisation of war is, in that sense, an adaptation of war to such altered conditions. Wars fought by regular armed forces that strove to defeat each other to debilitate the political will of the enemy and force him to surrender[124] have been replaced by a diffuse amalgam of very different actors, from intervention forces mandated by international organisations to local warlords aiming to secure their reign within a limited territory. These developments are of great consequence because conventional distinctions between wars among states and civil wars, between interstate wars and violent intra-societal conflicts are blurred and both forms of warfare merge. What is more, the use of military force has become normatively justified in the deployment of multinational forces in wars of peace or peace-keeping missions, a development that has brought military and police action so close together that they often can hardly be told apart. The military's increasing engagement with constabulary tasks[125] is opposed by its deregulation in such a way that warfare increasingly involves a brand of actors that neither respects the 1907 Hague Regulations respecting the law and customs of war on land, nor the Geneva Convention but, on the contrary, gains its own ability to act precisely by using asymmetrical forms of warfare. These actors draw the local civilian population into the conflict, not so much by using it for cover and as a logistic backbone – as is generally characteristic of guerrilla warfare – but by making the civilian population the prime target of their attacks. Therefore the clear division of warfare and the economics of organised crime has often been rendered meaningless. In global terrorism we see the temporary culmination of a development in which war has been transformed from confrontations between professional military apparatuses into strategic massacres carried out among civilians. As a result, the most important achievement of

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122 There are various estimates of the number of victims, for the medium figure given here see Gérard Prunier, *The Rwanda Crisis History of a Genocide, 1959–1994* (London: Hurst & Co., 1995), p. 265.
123 Carl von Clausewitz, *On War* (Baltimore: Penguin Books, 1968), vol. 1, ch. 1, p. 28.
124 This was done by strategies of defeat as well as exhaustion. The former targeted only the military apparatus of the enemy, whereas the latter included general economic prerequisites. This distinction was made by a German historian of war, Hans Delbrück.
125 See Morris Janowitz, *The Professional Soldier. A Social and Political Portrait* (Glencoe: The Free Press, 1960).

international rules of war – the clear distinction between combatants and non-combatants – has become obsolete.[126]

For some observers the developments sketched above were thus enough evidence to speak of completely new forms of warfare and, accordingly, of *new wars*. Both in the history of war as in military history there have always been military revolutions. Innovations in weapons technology and the organisational structure of military forces during the sixteenth century have prompted scholars to conceptualise them as fundamental transformations of warfare. For example, the increasing use of heavy artillery in siege warfare, soon found on the battle-field as well, nearly completely transformed traditional fortification techniques and, later on, the order of battle.[127] The often invoked *Revolution in Military Affairs* at the end of the twentieth century in the wake of which the US gained military superiority – among other things through the use of so-called smart bombs, the highly increased precision of long-range weapons as well as an in-credibly faster flow of information in battle, all made possible by microelectron-ics – is at the least comparable to the developmental thrust that took place at the beginning of the modern era. It is precisely this comparison of the military developments in early modern Europe and the most recent transformations in military affairs that is very revealing. The revolutionary innovations in warfare in the early modern era in fact caused the first arms race in European history, whose aim was to prevent potential enemies from taking a decisive technological or organisational lead. Asymmetrical constellations were thus prevented from occurring and rather than resulting in confrontations between very dissimilar armed forces, the arms race lead to the evening out of temporary imbalances between the powers and thereby stabilised and re-symmetricalised the system as a whole.[128] But for the microelectronics revolution in warfare this is not the case: By now the US is well ahead in terms of weapons technology and none of the current or even potential competitors seems to be able to make up ground – perhaps with the exception of the Europeans, but they are neither willing nor motivated to do so. Those developments have turned the US from a hegemonic

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126 For one of the very few that seriously considered the consequences of this development, see Michael Ignatieff, *The Warrior's Honor: Ethnic war and the Modern Conscience* (London: Chatto & Windus, 1998), p. 109. He proposes an improvement of extra-legal self-binding or pre-commitment mechanisms regarding actors of violence (for example honour) to limit the use of violence against civilians.

127 See Geoffrey Parker, *The Military Revolution. Military Innovation and the Rise of the West, 1500–1800* (Cambridge: Cambridge University Press, 1988) and Clifford J. Rogers, ed., *The Military Revolution Debate. Readings on the Military Transformation of Early Modern Europe* (Boulder: Westview Press, 1995).

128 Carlo Cipolla, *Vele e cannoni* [Sails and cannons] (Bologna: Il Mulino, 1983) traced the diffusion of innovations in arms technology in Europe taking casting techniques for reliable but still reasonably light cannons as an example.

into an imperial power.[129] More generally, the concept of new wars captures more than just the transformation of military affairs and warfare. It also takes into account the social and political conditions and circumstances under which armies are raised and wars are waged.

In fact neither warfare nor socio-political order can be separated from each other although teaching and research have time and again dealt with those issues separately. The revolution in military affairs that occurred in the early modern era also transformed the political conditions that framed warfare in fundamental ways. The increasing use of heavy artillery rendered town walls and castles worthless and made necessary the construction of effective defensive positions as well as exerting a compulsion to command all three forces – infantry, artillery and cavalry – to achieve effective collaboration among them on the battlefield, all of which let the costs of military affairs soar.[130] As a result, the state, of course only the larger territorial state, rose to be a monopolist of war since he was the only one able to raise the funds needed for the maintenance of a drilled standing army. The countless sub-state and quasi-private actors, feudal knights and capable war entrepreneurs, the condottieri, which before had filled the war zone, now either disappeared from military affairs or were swallowed up by the state. Precisely this separation of workers from their working tools, to use Max Weber's expression,[131] led to the statisation of military affairs in the early modern era: the new weapons were too expensive for individuals to follow their feudal lord into war with weapons of their own or be summoned for review and sell their services in exchange for a lump sum or pay. On top of that, troops had to be drilled to be useful in the new complex battle formations and that was not possible if hired shortly before the beginning of a war. Troops had to be maintained, disciplined and exercised while their clothing and the weapons they carried were no longer their property but the state's. The state thus became the master of war and in its wake the legislature has cast these developments in laws.

In some respects what has been termed new wars is a continuation of these developments but in other ways, it is just the opposite and even its reversal.

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129 See Herfried Münkler, *Empire. The Logic of World Domination from Acient Rome to the United States* (Cambridge: Polity Press, 2007).

130 For an account of the transformation of fortification techniques and siege war, see Simon Pepper and Nicholas Adams, *Firearms and Fortifications. Military Architecture and Siege Warfare in Sixteenth-Century Siena* (Chicago/London: University of Chicago Press, 1986). For an account of the development of infantry and cavalry and the coordinated command of all three arms on the battlefield, see Hans Delbrück, *Geschichte der Kriegskunst im Rahmen der politischen Geschichte* [History of the Art of War in the Framework of Political History], vol. 4 (1920) (Walter de Gruyter Verlag: Berlin, 2000), esp. pp. 3, 151, 188.

131 Max Weber, *Der Sozialismus* [Socialism] (Weinheim: Beltz Athenäum Verlag, 1995), p. 80.

The *Revolution in Military Affairs* that gave rise to the asymmetrical military superiority of the US in conventional warfare is continuing the process of a decrease in the number of actors able to engage in warfare due to an increase in the costs of armaments. In fact, the US is currently the only power capable of globally deploying its forces in effective action. Up until the 1990s this was on the whole true also of the Soviet Union. After that, its inability to raise sufficient resources for the microelectronic armament of its forces ruled out the USSR as an serious competitor to the US. The course of the 1991 Gulf war was a clear sign of it. Within 48 hours US forces had shattered the Iraqi army that used Soviet arms technology and Soviet tactics while sustaining no great losses themselves. From then on, even the marshals in Moscow realised that the US was in a military class of its own. The US policy of global military intervention, from the Caribbean and the Balkans to Central Asia, is based on the superiority of its arms technology and the fact that its forces do not need to be prepared for evenly matched, symmetrical battle. Symmetrical warfare inevitably involves heavy casualties that post-heroic societies are neither prepared nor willing to sustain. In post-heroic societies the ability for military intervention depends on its ability to minimise losses and precisely this fact makes asymmetrical warfare possible. Asymmetries are particularly effective if technologically superior powers make use of *new spaces* into which the enemy cannot follow and out of which action is taken. In earlier wars this had been above all the sea. Later on, in the second half of the twentieth century, it was airspace and, finally, during the last decades of the same century, it was space itself. It is absolute control of the seas, air space and space that allows US military interventions ashore without needing to fear immediate involvement in exhausting, low intensity wars in the course of which their troops would be worn down by small but constant losses. Where this happens – as in Iraq – it is the result not of military inability but of political failure.

However, since the 1980s there have been simultaneous, yet reverse developments. In countless wars along the borders of prosperity zones it is not cost and maintenance intensive weapon systems requiring highly qualified specialists to be operated but, rather, cheap weapons that are used. These weapons are easily operated by anyone: automatic rifles, landmines, multiple rocket launchers and finally pick-ups used as transport and combat vehicles. As a rule, even the troops deployed in those wars are not made up of professional soldiers but of hastily recruited fighters – at times even children – for which war has turned into a way of earning a living or a form of prestige.[132] Wars of this kind are cheap to

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132 See Trutz von Trotha and Georg Klute, „Politik und Gewalt oder Beobachtungen und Anmerkungen über das ‚Kalaschsyndrom'" [Politics and force or observations and remarks of the "Kalash-syndrom"], in *Der Begriff des Politischen*, eds Armin Nassehi and Marcus Schroer (Baden-Baden: Nomos, 2003), pp. 491–517.

wage and therefore the number of players able to engage in warfare has drastically increased. Only a few million dollars is often enough to start war and such sums are easily raised from affluent émigré communities or larger companies, through the concealed involvement of neighbouring states, clan chiefs and private war entrepreneurs.[133] The threshold of war has thus been lowered so much that it can easily be overcome by countless groups.

For the last two decades developments in warfare have presented a confusing and deeply contradictory picture. On the one hand the number of actors able to engage in warfare has been further reduced whereas on the other hand it dramatically increased. The progressive legal regulation of the war-related use of violence is in many wars opposed by the replacement of regular soldiers by fighters who neither feel bound by an ethos of chivalry nor by international rules of war. On the contrary, violence is used by those actors in whatever form is deemed functional or brings the desired result. It was thus that world political regions have developed where war is no longer a seriously considered instrument of politics, as for example in Europe, and other large regions where de-statisation lead to endemic war and where there are no prospects of peace. The reasons lie in the multitude of players engaged in acts of war, their diffuse organisational structure and, finally, in the interconnection of the economics of war and international organised crime.[134] Many of the new wars therefore last, not for months or years, but for decades.

Considering what has been described above, it is no longer sufficient to get carried away in an endless enumeration of details and archiving of statistics. Rather, the task of political science must be to focus on the two crucial questions: Has the model of warfare changed or is it still the same? Is it still possible to plausibly apply the – admittedly – European model of war as an analytic framework to current wars? A model that, as a matter of principle, assumes

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133 A remarkable dimension of raising finance is described by Katrin Radtke and Klaus Schlichte, „Bewaffnete Gruppen und die moralische Ökonomie der Diaspora" [Armed Groups and the Moral Economy of the Diaspora], in *Transnationale Solidarität. Chancen und Grenzen* [Transnational Solidarity. Opportunities and limitations], eds Jens Beckert et. al. (Frankfurt/New York: Campus Verlag, 2004), pp. 181–194.

134 See in particular Werner Ruf, ed., *Politische Ökonomie der Gewalt. Staatszerfall und die Privatisierung von Gewalt und Krieg* [The Political Economy of Violence. The Dissolution of States and the Privatisation of Violence and War] (Opladen: Leske + Budrich, 2003), Peter Lock, „Ökonomien des Krieges. Ein lange vernachlässigtes Forschungsfeld von großer Bedeutung für die politische Praxis" [The Economies of Wars. An Under-Developed Field of Research of Great Importance for Practical Politics], in *Die Zukunft des Friedens. Eine Bilanz der Friedens- und Konfliktforschung* [The Future of Peace. An Account of Peace and Conflict Research], eds Astrid Sahm et. al. (Wiesbaden: Westdeutscher Verlag, 2002), pp. 269–286, and Sabine Kurtenbach and Peter Lock, eds, *Kriege als (Über)Lebenswelten. Schattenglobalisierung, Kriegsökonomien und Inseln der Zivilität* [Wars as Spheres of Life and Survival. Shadow Globalisation, War Economies and Islands of Civilization] (Bonn: Dietz Verlag, 2004).

symmetry between actors who for their part make use of this symmetry for the ethical and legal regulation of war. We must answer either yes or no. Details and statistical studies can provide us with information about the variance of a model but they cannot indicate shifts from one model to another that has not yet been formulated. This, however, is at the core of the controversy about the concept of new wars.

But is the question of what model of war to apply of relevance at all? – It certainly is, in fact crucially so. The model is a blueprint for assessing the creativity, rationality and legitimacy of strategic actions undertaken by different actors of violence. Only by reference to the assumptions inherent in a general model does it become possible to judge an action creative or conventional, the use of force rational or irrational and, finally, a decision legitimate or illegitimate, legal or illegal. Without such a framework, it is simply impossible to adequately judge and assess situations, decisions made, positions adopted and actions taken – unless all of those are subjected to moral judgement incontestable by cultural and political diversity. This, of course, is a possibility, albeit a little rewarding one for political analysis since, as a rule, judgements of this kind are made prior to any concrete situation. They are possible without any knowledge of the specific details, prevailing conditions and circumstances and, hence, scientific analysis is of little importance in their making. Scientifically sound analysis, however, is only possible on the basis of conceptional assumptions: whether war is symmetrical or asymmetrical, what kind of protagonists engage in it, what are their ultimate goals or purposes etc. The concept of new wars assumes a fundamental shift in the model of war. Or, to use Clausewitz' words: the grammar of war has changed in fundamental ways,[135] current warfare follows different rules than it used to in the past.

This begs the question whether these supposedly new rules had not governed non-European wars all along? Without question, this can hardly be denied. Nevertheless, the European model pre-determined political and military developments, both in America and Asia. Even those states that had won their independence in guerrilla wars followed the European example and raised regular armies. The admission into the circle of recognised states occurred on the basis of the supposed capacity to wage war according to the European model. The transformation of guerrilla units into regular armed forces and the transformation of underground irregulars into soldiers both symbolise the intended concealment of the new state's asymmetrical origins when assenting to full sovereignty, as well as the new state's claim to reciprocal recognition of its sover-

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135 „Er [der Krieg] hat freilich seine eigene Grammatik, aber nicht seine eigene Logik." [It (the war) certainly has its own grammar but not its own logic] Clausewitz, *On War* (1968), vol. 8, ch. 6B.

eignty by virtue of the ability to wage symmetrical war. Today, this mechanism of recognition has lost its formative power. Hardly any of the numerous warlords of semi-privatised wars that occur in the periphery show any inclination to transform the temporal control that was gained over an area for the purpose of economic exploitation into a regular state order. Likewise, terrorist networks make no visible efforts to take on the form of territorial statehood. For obvious reasons: they would, if they tried, become an easily defeated enemy of those powers they aim to severely damage by means of de-territorialised and non-state forms of violence. The occasionally voiced opinion that the new wars are statebuilding wars just like the wars of sixteenth and seventeenth century Europe[136] rests therefore on shaky foundations. Rather, those wars are state-disintegrating wars. In any case, the spread of the new wars goes hand in hand with an increasing number of disintegrated states.

The main feature of the new wars is the temporal coincidence of several combined factors which, each taken by itself, are not at all new. Only in combination do they lead to a drastic change, not only in warfare but also in the perception of threats. Asymmetry and asymmetricalisation in response to it are no new phenomena: Asymmetrical warfare is very likely to be found much more often in the history of war than symmetrical war. The same is true of sub-state and semi-private actors of war. They too can be found throughout history. The Italian *condottieri* of the fifteenth and sixteenth centuries are perhaps the best known example of such actors in Europe. In the Thirty Years War the interests of private entrepreneurs of war in the continuation of conflict gained considerable political influence.[137] The third feature of the new wars, the non-military, that is the irregular, organisational structure of violence and the focus on non-military targets is again not a new development. Already the Assyrians, particularly Tiglatpileser III, used every available means to spread terror including "ethnic cleansing" in the building and consolidation of their empire. It is, on the contrary, rather remarkable that after the statisation of war warfare could be successfully and generally kept free of both, the systematic use of violence against the civilian population and policies of systematic ethnic cleansing and ethnic resettlement. The focus on the military use of violence is characteristic of the model of war that developed in Europe under the conditions of the Westphalian

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136   For an example see Johannes Burckhardt, „Die Friedlosigkeit der Frühen Neuzeit. Grundlegung einer Theorie der Bellizität in Europa" [The Absence of Peace in Early Moderen Europe. The Foundations of a Theory of Bellicism], *Zeitschrift für Historische Forschung*, vol. 24, no. 4 (1997): 509–74; for a conceptionally based approach see Jens Siegelberg, *Kapitalismus und Krieg. Eine Theorie des Krieges in der Weltgesellschaft* [Capitalism and War. A Theory of War in Global Society] (Münster/Hamburg: Lit-Verlag, 1994), p. 138.

137   For a detailed account see Münkler, *The New Wars*, p. 32.

system.[138] However, in the course of the twentieth century the system's former binding force eroded. The first major population shifts occurred at the beginning of the twentieth century in the Balkans and Asia Minor.[139] Nevertheless, the global projection of this very European model of war has lastingly shaped political imagination and perspectives until today. Whenever Kant's promise of perpetual peace was evoked and scholars of democratic peace theory referred to it and claimed to have produced empirical proof in support of the Kantian theses – this was always based on the assumption that the states were the masters of war. Where warfare was beyond state control and non-state actors gained the capacity to wage war, not only Kant's prospects of peace collapsed but the United Nations too lost a large part of its influence. The reason why the concept of new wars was and is so vehemently attacked by many critics perhaps has its basis in the specific kind of political disappointment the concept presented to them.

Again, the main features of the new wars are not a number of individual developments but the overlap of the privatisation, asymmetricalisation and demilitarisation of warfare with a drastic and simultaneous weakening of the formative and orienting power of the classical model of war. This is not to say that the changeover in the model of war should be lamented. After all, wars of the classical interstate type had released such enormous destructive force that they became impossible to wage for highly developed industrial nations even before they reached deadlock with the development of nuclear arsenals. At any rate, they could no longer be waged as symmetrical wars. The course of World War I but even more so World War II had already made that more than plain to anyone. The classical interstate wars that occurred after 1945 were wars on the fringes of prosperity zones where states fought each other, states that without being supplied with weapons and equipment by industrial nations would not have possessed the ability to do so. This in turn was the reason why those states did not have the same high level of vulnerability as industrial nations. The devastating consequences of post-industrialisation, interstate wars therefore became only partly manifest in these cases. What remained nonetheless, were on the one hand a dent in the demographic structure of those societies caused by the large numbers of soldiers killed and wounded, and on the other hand an enormous burden of debts to be repaid by the population over extended periods. The last of these classical interstate wars are those between Iraq and Iran (1980–88)

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138 The Westphalian System, a shorthand for the political order that unintendedly developed in Europe after the two peace agreements of Münster and Osnabrück, the so-called Peace of Westphalia. This order is characterised by the fact that the states are not only by law the monopolists of war but in actual fact have become the monopolists of the ability to wage war.

139 See Dan Diner, *Das Jahrhundert verstehen. Eine universalhistorische Deutung* [Understanding the Century. A Universal-Historical Interpretation] (München: Luchterhand, 1999), p. 195.

and between Ethiopia and Eritrea. Contrary to guerrilla wars of the period of liberation from colonial rule, symmetrical interstate wars of this kind had only a limited effect on international order: Borders were moved or confirmed but no more than that. Leaving aside World War I and II which to only a limited degree can be regarded as symmetrical wars, classical interstate wars more likely have conservative effects on international order. By comparison, literally revolutionary effects are produced by asymmetrical wars.[140] In asymmetrical wars not only do entirely new kinds of actors become involved but also the norms and rules of the existing order are weakened and dissolved.

The era of classical, interstate wars has most likely come to a close. But this by no means entails an end of the history of war – to both the concept of new wars gives expression. Most of the elements that after 1648 were characteristic of European warfare have likewise existed long before. Only the combination of those elements, its formative power for every party involved and the norms and rules it generated lead to a new form of warfare. The Peace of Westphalia in 1648 is, of course, only the symbol of this process of change that occurred over several decades before and after. The changes often went unnoticed and the process was imperceptible while it occurred, but at the end of this process war had a different face. Much the same is true of the current changes in warfare. One frequently levelled criticism against the concept of new wars thus assumes the detected changes to be overdrawn. Be that as it may, it is precisely what is necessary to detect change at an early and, hence, politically timely stage. The goal of political theory building, therefore, cannot lie in conceptually absorbing change only after it happened, when everyone else has already come to terms with it.

Does the concept of new wars then allow predictions regarding twenty-first century warfare? There are probably three types of war that will play a decisive role in the new century's regimes of violence:[141] First, there are *resource wars*, mostly in the periphery of prosperity zones, in which – as may be observed since the 1990s – sub-state and semi-private players rival each other for control over local natural resources or raw materials as well as the local population. The *purpose* of this type of war is to capitalise on natural resources that are exploitable at relatively little cost and effort, its *goal* is military control of the territory in which oil, diamonds and precious metals are found. The *means* to this end mainly consists of setting up a reign of terror over the local population, wanting not only to deprive them of their share of the natural resource dividend

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140 For a detailed discussion see Christopher Daase, *Kleine Kriege – große Wirkung. Wie unkonventionelle Kriegführung die internationale Politik verändert* [Small Wars with Major Consequences. How Unconventional Warfare is Changing International Politics] (Baden-Baden: Nomos, 1999).
141 See Münkler, *Der Wandel des Krieges*, p. 144.

and thereby suppress any competition, but also aiming to turn the population into a cheap labour force to rake in additional profits. In such wars even water becomes a very important strategic resource, above all as a means of exerting control over and dominating the local population. Resource wars are financed by so-called open war economies, that is, through their economic links with the world economic flow of funds and commodities. As a result, such wars do not come to an end due to economic exhaustion or the fact that, with growing physical exhaustion, the belligerents develop a greater taste for peace but, rather, *low intensity war* itself is the economic flywheel for its own continuation. Those involved need the war to stay in business and precisely this is the reason why this type of war goes on for such extended periods and is almost impossible to end through a peace settlement.

Because wars of this kind are fuelled by many different links to the world economy, international organisations will always be tempted to literally drain them by pursuing an embargo policy. Economic sanctions, however, will only have a limited effect: Firstly, because the belligerents have long since established close ties with international organised crime and use the back channels of shadow globalisation to transport raw materials, transfer assets and draw funds in ways that can hardly be paralysed by implementing embargo policies. Secondly, where the flow of money and goods can be effectively cut off, warlords make sure it is above all the local population that is affected by the sanctions and that this fact gets full international media coverage. That way most embargo policies come under intense moral pressure and are later amended to include many exceptions which effectively render them ineffective while resource wars continue uncurbed. In addition, regional warlords can gain political legitimacy by exploiting the ethnic, religious or cultural divisions that exist within the territory they control to justify their use of violence as part of a war of liberation or resistance.

This mechanism by which resource wars become ideologically charged is the reason why time and again powers from the prosperity zones, first and foremost the US, interfere in, try to end or help one side to win those wars. Of course, it is sometimes also the power's own interests in the strategic control of resources that prompt them into action. Such interventions can also serve international disarmament regimes or aim to guarantee nonproliferation. In general, this type of war can be termed *wars of pacification*. Often geo-strategic, economic and humanitarian motives are intertwined to a degree that it becomes impossible to say which of those is the main factor deciding intervention. However, unless these interventions are only of short duration and do not entail heavy losses on the intervening side, they face inherent problems. The temporal discrepancy between prolonged resource wars and relatively short wars of pacification is one of the reasons why interventions are very rarely successful at all.

In many cases interventions are based not on strategic considerations of the intervening powers, but are rather a result of giving in to moral pressure exercised by NGOs' and the media in the face of impending humanitarian catastrophes. In principle, the post-heroic societies of the West should be prone to let resource wars take their course and merely offer relief in the form of humanitarian aid.

The regions of disintegrated statehood that emerged in the wake of such wars have seen the emergence and establishment of clandestine groups that possess a growing strategic capacity to attack the welfare zones of the OECD-world and are developing new forms of *internecine war* against the rich North. To this end they employ terrorism and have thereby updated the exhaustion strategy.[142] Contrary to guerrilla war as a conventional form of asymmetrical warfare, terrorism is able to carry violence deep into the territory of the enemy. Whereas guerrilla war is in principle a defensive variant of the asymmetricalisation of war out of a weaker position, terrorism as a political-military strategy is able to go back on the offensive. Since terrorism has in recent years been considerably successful that way, it must be assumed that it will be continued with increased frequency in the future. Guerrilla war with its small and scattered combat units is dependent on the support of the local population which takes over logistics, offers cover and through its own sacrifices legitimates the course of war. Guerrilla wars are only possible if the guerilleros can rely on the support of the majority of the local population. Where support is lacking, war is lost. With terrorism this is not the case: the support needed from the local population has been replaced by the use of the civil infrastructure of the country attacked. For terrorist operations, complete secrecy is thus a vital pre-condition. Airlines, means of mass transport and communication, mass media and even holiday resorts serve as both means and targets of terrorist attacks. The real target, however, is the unstable psychological infrastructure of above all the Western countries. By attacking this psychological infrastructure the political will of the country attacked is to be exhausted. Terrorism is out for the psychological effects of violence, that is fear and – in the truest sense of the word – terror, both spread the more effectively the greater the density of media coverage in the attacked country. The goal of this strategic use of violence is the socio-economic damage caused by fear, it is not the actual material destruction that the attacks involve. Those economic effects when reaching an unbearable degree will force the attacked to give in: this is the terrorists' rationale. In this sense, even religiously motivated terrorism is a strategy of violence that will constitute one of the new forms of warfare in the twenty-first century.

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142 See Münkler, *Der Wandel des Krieges*, p. 148.

THE FUTURE OF WAR: WHAT ARE THE NEW COMPLEXITIES?

by Christopher Coker

I shall attempt to set out a central thesis and develop some sub themes. My central thesis takes me to a classic work by the early 20th century American philosopher, William James. In 1910, he wrote a pamphlet for The American Association for International Conciliation which we know as his essay, "The Moral Equivalent of War".

James was a pragmatist, indeed, something of a utilitarian, and therefore an important witness to what war had become, or was in the process of becoming. The Anglo-American discourse on war has been largely instrumental or utilitarian. We set out ends (such as making the world safe for democracy) and ask how we can secure them through war. For us war is not an end, as it is for many societies. It is merely a means.

James was a pacifist by conviction, but he was a militant one. The title of his paper gives him away. He acknowledged that he liked the martial values, such as intrepidy, contempt of softness, and obedience to command. "The competitive passion", he wrote, "is our fate; as a species we are by nature competitive". The fact that we still have not found a moral equivalent for war even now explains its continuing appeal.

James argued, in line with his philosophical beliefs, that a practice is only right (or true) if it is profitable to pursue. "The true is only the expedient in our way of thinking… our obligation to seek truth as part of the general obligation to do what pays".[143] We cannot reject any idea if useful consequences flow from it. His central insight was that war was no longer paying its way (an idea made fashionable by other contemporary writers, notably Norman Angel in his book *The Great Illusion*).

The case for why the Industrial Revolution had made war increasingly unprofitable was perhaps best made by Karl Polanyi in his book *The Great Transformation*, first published at the height of World War II, in 1944. The Industrial Revolution, he wrote, had created a distinct stage in the history of civilisation; it had forged "an acute peace interest". War was not good for profit margins, or systems such as the foreign owned bond market.[144] Re-published in 2001, the book is now to be found on syllabuses of political economy courses.

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143 William James, *The Essential Readings*, ed. Bruce W. Wilshire (Albany: State University of New York Press, 1984), p. 350.
144 Karl Polanyi, *The Great Transformation* [1944] (Boston: Beacon Press, 2001).

And Polanyi would probably have no reason to revise his opinion, even today. Contrary to their critics, neither Polanyi nor Angel argued that wars would not be fought. They only maintained that they would not be profitable. The Iraq War, as it happens, is the most costly war the United States has ever fought in real terms. It is costing roughly $7bn a month (i.e. $300m a day).

Not only was war becoming unprofitable, added James, it was becoming embarrassing. Ministries of war were giving way to ministries of defence. What had fuelled war in the past, "pure loot" and "political mastery" were no longer "morally avowable" aims, certainly not, he added, for countries such as Britain and the United States. Both nations armed solely for "peace".

> It may even reasonably be said that the intensely sharp competitive preparation for war by the nations is the real war, permanent, unceasing, and that the battles are only a sort of public verification of the mastery gained during the peace interval.[145]

If I had been writing this essay in 1910 I would not have talked of war, I would have talked of defence. Wars broke out when "defence" broke down. I recall reading quite recently a book on the causes of World War I which argued that if only the Great Powers had spent another £25m on armaments, Europe would have been spared conflict in 1914. This inspired the guilty man thesis about appeasement – that we had not been adequately prepared in the 1930s, and thus been unable to deter Germany from going to war. This situation, of course, reached its apotheosis during the Cold War (so-called because it vividly illustrated George Orwell's maxim "War is Peace").[146]

If James were alive today, he might have said that war had now become *security*. In this case it has mutated again. Security is the grand metaphor for our time. We talk of being secure in our beliefs or values. Our wealth is measured in the currency of financial securities. We have security studies, systems and institutes. We have security services to protect us, and security clearances which define our importance. We contract out to private security companies. Security is the language of the hour. It is also the language of war. I begin with James' essay for a number of reasons. Let me mention only three.

First, he was observing (without being conscious of it) that war is an autonomous system. "Is war something which really does have a life of its own?" asks Barbara Ehrenreich in her book *Blood Rites*; what she calls a

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145 James, *Essential Writings*, p. 351.
146 For an excellent discussion of the extent to which war and peace became indistinguishable in the course of the twentieth century see Akira Iriye, "War as peace, peace as war", in *Experiencing the Twentieth Century,* Philip Windsor and Georges Nivat (Tokyo: University of Tokyo Press, 1985), pp. 15–31.

"self-replicating pattern of behaviour"?[147] Does it adapt to the external environment?

In a way, war can be seen as a "meme", a word introduced to us by Richard Dawkins, but developed since by several authors (Susan Blackmore, *The Meme Machine*; Kate Distin, *The Selfish Meme*; Richard Brodie, *The Virus of the Mind*). Recently memes have become of interest to historians (Nial Ferguson, *War of the World*) and they should be of interest to the security community too.

Dawkins made his name by writing about the "selfish gene". Perhaps, we should entertain the alarming possibility that war is *self-serving*; it owes its success to its peculiar capacity to turn men's minds to serve its own ends rather than those of human beings themselves. Roughly, this is what Dawkins meant when he coined the term meme – an element of culture that works in the mind, something like a virus, changing the behaviour of the individual it infects in such a way as to help spread itself from one mind to another even though the carrier may derive no personal benefit, and may actually be harmed. The "selfish gene" is dedicated only to its own replication. So is the "selfish meme," Nial Ferguson explains in *War of the World,* where he uses the term, "a virus of the mind," to suggest that in the twentieth century racism spread between peoples not because it benefited them, but because it benefited racism.[148]

A meme can be any non-genetic material transmitted from person to person: a word, a song, an attitude, or indeed a religion. Whether they exist or not, memetic imitation is a good way of seeing how ideas spread, at least. It is possible to object that memes do not have strategies for insinuating themselves in one's brain, but nor for that matter do genes. Yet geneticists write about genes "replicating" themselves, and "competing" for space in the gene pool. The justification for this, as a metaphorical shorthand, is that natural selection preserves those genes that happen to act as if they were pursuing a strategy. Likewise, the ideas that win out are those that evolve, or compete, more successfully than others. The critical question then is why do some ideas survive when they are not necessarily good for us.

One answer is that memes survive not only because of their direct appeal. This was the point of James' essay – it is difficult to find a "moral" alternative to war which allows us to satisfy our craving for glory, or sacrifice, or honour. War flourishes in the presence of other memes as part of a memeplex. One of the most tenacious memes is honour and when honour gets involved with, say, religion we have a potent mix. In many Islamic societies honour has an especially tenacious hold over the imagination. When people feel dishonoured

147 Barbara Ehrenreich, *Blood Rites: Origins and History of the Passions of War* (London: Virago, 1997), p. 234.

148 Nial Ferguson, *War of the World*: *History's Age of Hatred* (London: Alan Lane, 2006).

by Western actions that appear to show insufficient respect for the faith or the people who share it then the results can be lethal. When added to an age old belief that the West has weakened the Muslim world through colonialism then the mixture is particularly toxic. Arab and Pushtun ideas of honour are an important aspect of militant Islam, which are too often neglected by politicians when committing armed forces to ambitious projects of post-war reconstruction. The West too has its honour codes but we have instrumentalised them – we talk of credibility instead, and when credibility is challenged as it was on 9/11 we find ourselves especially vulnerable.

My second reason for beginning with James' essay is that he identified an important trend. War was not only becoming unprofitable, it was also becoming indecisive. The dynamic of "war as defence" was predicated on the belief that the only purpose of war was its prevention. History could continue through a different medium, the market.

I have little sympathy with the school that predicts the end of war because of the triumph of neo-liberal market principles, but there is an explanation for war's indecisiveness which can be found in the nature of war itself. One of the striking features of modern historical research is that it is possible to identify a long term trend towards complexity.

Complexity is built into everything, beginning with the Big Bang, the creation of the universe. The universe became more complex as it expanded. At the moment of its birth, matter and energy could not be distinguished from each other; nor could the fundamental physical forces of gravity, electromagnetism and strong or weak nuclear forces. As it expanded and cooled, so it became more complex. Matter and energy went their separate ways. Stars appeared, compressed and heated by the force of gravity. As larger stars died in supernovae they created heavier elements which provided the raw materials for complex chemical structures including living organisms.

What is distinctive about this particular increase in complexity is that our own species is infinitely more complex than the universe itself. Take one measurement. There are only about $10.^{80}$ atoms in the entire universe. The brain contains only about $10.^{27}$ atoms but the feeling of limitless thinking that we possess derives not only from this number alone but from the vastness of the numbers of possible connections that can exist between groups of atoms. By counting the number of neural configurations that the human brain can accommodate, it has been estimated that it can produce about $10^{70,000,000,000,000}$ possible "thoughts". This is what we mean by complexity. Were our minds significantly simpler, then we would be too simple to know it.

It is these neural connections that allow us to learn collectively. Equipped with language, we can share what we have learned as individuals. We can do so with such precision that more knowledge accumulates within the collective

memory than is lost. As a result, our species has access to a diverse repertoire of ideas, behaviour and techniques. *Collective learning* (i.e. the capability to accumulate knowledge at the level of the community) is what makes us different from every other species on the planet.

This explains why human history is a history of rapid, accumulating change which we often misleadingly call "progress". Progress itself is a cultural construction – an 18th century concept born in the Enlightenment which over time was translated into an ideology which is still tenaciously held, even in the face of conflicting evidence including the persistency of war. What is more credible, for historians, is not that progress exists but that history itself is *directional*. And what is directional is our capacity to learn, to adapt to our environments, and to learn increasingly quickly. Our civilisation has survived for that reason, as opposed to most pre-modern societies that failed to adapt. What makes us learn quickly (to learn more but not necessarily to know better) is the exchange of information which is now facilitated as never before through global networks including the internet. In 1965 the engineer Gordon Moore spelled out the principle that has become known as Moore's Law – the capacity (i.e., speed) of microprocessors doubles every 18 months. Recently it has been supplemented by Gilder's Law which states that on the net the transmission speed – or bandwidth – doubles every year.

Clausewitz never formally identified complexity as part of the nature of war except in one formulation: "Everything in war is simple, but the simple is *increasingly* difficult".[149] Those who know their *On War* will recognise that the word "increasingly" is my own interpolation. War has become increasingly complex over time, and as a result increasingly indecisive. The historian Russell Weighley even wrote a book to challenge Clausewitz's claim that the history of war in Europe since 1630 has been the history of decisive battles.[150] Another historian Brian Bond in his book *The Pursuit of Victory* (1994) suggests that all students of military history must be struck by the ambivalence, irony and transience of most military victories in the late modern age, however spectacular or decisive they appeared at the time. Indeed, modern history is replete with commanders such as Napoleon, Robert E Lee and the German High Command in both World Wars who achieved tactical successes at the price of *strategic* ruin.[151]

Even the US military – the most formidable military machine ever seen is finding it almost impossible to translate its undoubted tactical successes into a decisive strategic result. One explanation for this is that speed is often the enemy

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149 Cited Beatrice Heuser, *Reading Clausewitz* (London: Pimlico, 2002), p. 82.
150 Russell Weighley, *The Age of Battle: The Quest for Decisive Warfare from Breitenfeld to Waterloo* (London: Pimlico, 1991).
151 Brian Bond, *The Pursuit of Victory* (Cambridge: Cambridge University Press, 1994).

of the good. "Speed kills", writes General Franks in his memoirs.[152] This is not necessarily true. Looking back at the insurgency in Iraq, George Bush lamented that the United States had been the victim of its "catastrophic success". Or as General Myers asserted, its victory in 2003 was too "elegant".[153] What both men meant is that a society is more likely to accept defeat – and as Clausewitz tells us, a country only prevails in war when an enemy accepts defeat – when it is reconciled to it. Often this is after years of struggle. As was the case with Germany, and as we are beginning to find out from historians is even true of Japan, defeat can even come as something of a relief. Moreover, if society puts up a good fight, there is no shame in surrender. If a society collapses in three weeks, the demoralisation that will set in immediately afterwards is likely to be corrosive. Honour must be maintained. A crushing tactical victory on the battle-field which provokes an insurgency campaign which is potentially unwinnable, is no success at all. We are back to memplexes here.

Our world is conceivable only as the compression of time. History is, in part, the story of acceleration. And things have been speeding up for some time. Speed unfortunately takes no account of complexity which is why the direction in which the US military is taking war is so counterproductive. Paul Virilio calls speed a "negative horizon"; the sensorial privation that obscures our perception of the world, and blinds us to the consequences of our own actions.[154] Speed deprives us of contact, or direct experience. Unfortunately, writes Zygmunt Bauman, speed has become a destiny, at the same time that it becomes a destination. In other words, speed has no inherent virtue, it is an addiction.

In war this is especially true. Every obstacle to speed (such as the Fedda'yeen fighters who appeared unexpectedly in 2003 as the US army advanced toward Baghdad) is seen as a temporary "obstacle" or constraint, easily bypassed, or pushed away. And that is the point. Obstacles do not always go away. They are merely sidelined for the moment, and reappear at unexpected and inconvenient moments later on. Those obstacles are, in reality, limits to military operations: the warning signs not to transgress the limits. Unfortunately, we tend to redefine them as problems. And problems (as we moderns know only too well) are merely challenges which set tasks that are by definition solveable. We have neither the time nor the inner urge to reflect on the darkness at the end of the tunnel. We tend to lock the stable door after the horse has bolted. Unfortunately in our race to get to the future, there is a constantly growing number of stable doors demanding to be locked. At the stage we are now, (adds Bauman) "a large part of "daily progress" consists of repairing the direct or "collateral"

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152 Cited Thomas E. Ricks, *Fiasco* (New York: Free Press, 2006), p. 124.
153 Ibid.
154 Paul Virilio, *Negative Horizon: An Essay in Dromoscopy* (London: Continuum, 2005).

damage done by past and current efforts to speed it up".[155] This is especially true of the collateral damage done by war.

None of this is deterring our military engineers who are planning to build hypersonic missiles that can circle the earth in four minutes. They are busily engaged in developing laser weapons as the latest form of kinetic energy, in part because they are much more speedy and reliable than missiles. A laser beam moves at 300,000km per second, compared with the fastest missile which moves at 3km. The speed of data transmission is increasing exponentially, rendering soldiers information processors in the process.

Speed, in this regard, translates into distance, for the faster we move the more distant we are from the *consequences* of our acts, or the enemy we engage. We are planning to build hypersonic missiles as well as autonomous thinking machines, robots that can act on their own initiative. They too are part of our "negative horizon"; they too will render the enemy even more distant emotionally and psychologically, and threaten to strip him of his humanity as a result – making it impossible of course, to realise Sun Tzu's maxim: Know your enemy as you know yourself.

This was known to Clausewitz who claimed that Napoleon won his battles because he could get his troops to the battlefields faster than his enemies. He was able to outmarch them, quite literally for the unfortunate General Mack at Ulm (1805) when he was forced to surrender his army without a fight. But as even Napoleon found, speed becomes a problem too when it involves what strategists call the "culminating point of operations" – the point at which an army is so successful that it is unsuccessful (i.e., it cannot maintain itself in the field; it reaches a point where its energy is dissipated). Eventually even the most successful generals tend to discover that the principle of entropy operates in war, as it does in everything else; energy dissipates the more it discharges itself. As General Fuller wrote, "the offensive carries *a priori* in itself a fatal germ; it weakens itself by its own success".

THE DENIAL OF VICTORY

What we confront might have astonished Clausewitz: for we have had to renounce any prospect of victory in the campaigns we fight. This was already embodied in the "system" that constituted the Cold War. It is found in the debate between two ex-World War II generals. The first, Douglas McArthur told Congress after his dismissal by Truman than there was "no substitute for victory". The second, Dwight Eisenhower, who succeeded Truman as President, later commented that the only thing worse than losing a global war was winning one. "Victory" in the Cold War meant ensuring that war never broke out.

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155 Zygmunt Bauman, *Liquid Fear* (Cambridge: Polity, 2006), p. 71.

In today's world victory is no longer an objective. Are we winning the War on Terror? In this war, writes the military historian Roger Spillers, "victory is an outmoded concept."[156] In the War on Terror we seek more security, not victory and we know we are more or less secure according to a series of "metrics": are we stopping recruitment by movements such as al-Qaeda; are we winning the battle for hearts and minds; are we cutting off funds to terrorist groups; are we stopping state support for them, as we have done with Libya? And then there are the infamous "body counts" which have re-appeared since Vietnam – how many terrorists are we killing a month? If this is the American approach it is also the European. A report submitted to the EU defence ministers last October claimed that war has become so complex, and unpredictable in its consequences, that the military should avoid the traditional concept of "outright victory" and focus instead on promoting greater security.[157] This is the face of war in the early twenty-first century, one that many of us are not yet ready to acknowledge.

My final reason for invoking James is the title of his essay, "The Moral Equivalent of War." As he acknowledged, war enriched or validated life because of the values it promoted such as honour, glory and especially sacrifice. These were its legitimating principles. Glory may not have survived the battles on the Western Front but honour, and sacrifice still have their appeal. Some of these factors have been discussed quite recently in books by Harry Mansfield (on manliness) and James Bowman (on honour). They are worth revisiting. The question is: what do we sacrifice ourselves for?

In James' world if there were still a place for knights, it would be as instruments of social improvement. "We had better proclaim ourselves the knights errant of liberty and organise at once a crusade against all despotic governments," proclaimed President John Taylor in 1852. There was still a place for the use of the sword to advance what Taylor called "the doctrines of republicanism". When it came to war its foremost thinkers came to the striking conclusion that the only legitimate reason for the practice was the improvement of the human lot. War could educate for freedom. There have been many different variations on this theme. "Making the world safe for democracy" was, and remains, its most famous expression.

We can glimpse a fascinating intimation of the vision in a public debate from the mid-nineteenth century, and the irony was glimpsed at the time by the London correspondent of the *New York Daily Tribune*, the young Karl Marx. He was writing about a conflict that is hardly remembered today, the Arrow War (1856–60) between the ailing Chinese empire and Britain and France. It was

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156 Roger Spiller, *An Instinct for War: Scenes From the Battlefields of History* (Cambridge: Harvard University Press, 2005).

157 *Times*, 25 November 2006.

largely about trade but it was seized upon by radical Benthamites as a chance to "civilise" the Chinese, as well as to punish human rights abuses. In a great parliamentary debate it was the Conservative opposition which censured the Liberal government for thinking that war could, or even should, be fought in the interests of humanity. And Marx was quick to pick up the irony:

> The Earl of Derby, the chief of the hereditary aristocracy of England, pleading against … Bentham, pleading for humanity against the professional humanitarian …appealing to the "vox populi, vox dei" against the greatest–benefit–of–the–greatest–number man; the descendant of the conquerors preaching peace where a member of the Peace Society preached red-hot steel…[158]

The preachers of red-hot steel were at it again in Kosovo 150 years later for another humanitarian principle: the punishment of ethnic cleansing.

When talking of the need to end oppression, our forefathers usually invoked the human spirit. Today, we tend to think not so much in terms of redeeming the world from sin as securing the human body against pain. The most vivid illustration of this was the Kosovo War – the first "humanitarian war" in history, an 78-day air blitz which can be seen as the logical end of the Enlightenment's wish to improve the human lot. Like Roosevelt's "crusade for freedom" its central vision was that the sole legitimate reason for going to war was to end oppression, in this case ethnic cleansing. We might call this the bourgeois style of war, for it is very much a middle class vision. Kant was wrong in thinking that war would end when the aristocracy yielded power to the middle classes. The latter merely reinvented it.

In his most recent book, George Steiner writes of the European bourgeoisie enjoying a privileged season from the Battle of Waterloo to the first battles on the Western Front in 1915. He calls it "an armistice with history" (a rather striking phrase). But by the time it had displaced the aristocracy in power, it had its own dreams of a new world order. That vision was grounded of course on the Kantian conceit that republics (i.e. democracies) do not go to war against each other. It followed that the only purpose of war was to make the world safe for democracy. This ambition has not lost its purchase on the liberal imagination. Indeed, it has migrated from war as defence to war as security. Western societies now have two interests in war. One is social improvement: war as state-building. The other follows from the idea that war can "educate for freedom".

In the United Kingdom Tony Blair, in particular, has been a leading champion of the use of armed forces, which in his own words are a vital if "im-

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158 Cited Douglas Hurd, *The Arrow War: an Anglo-Chinese Confusion 1856–60* (London: Collins, 1967), p. 56.

perfect instrument for righting humanitarian distress".[159] It is now commonplace for politicians to conceptualise security as a pre-condition of democracy and to see the deployment of soldiers as a means of achieving both security and democracy at the same time. Examples of where state-building has become the primary reason d'etre of intervention include the stationing of British forces in Bosnia, Kosovo, and Macedonia, as well as more recently in Afghanistan and Iraq. It is all part of the "global governance vision" or what Timothy Edmunds calls "the humanitarianisation of the military", an overlooked but parallel process to "the militarisation of humanitarian assistance".[160] Edmunds is not alone in this opinion. Ulrich Beck has written of "NATO's militant humanism" in the Kosovo war, to add a German voice.[161] To invoke another, Jürgen Habermas refers to the "juridification of war" as war's latest incarnation.[162] All of this was commented on by a third (in the eyes of some) suspect German writer, Carl Schmitt, who saw the United States and the United Kingdom as world police powers who used war to create a new world order. "War has been transformed into a police action against troublemakers, criminals and pests".[163] The pests once included Saddam Hussein and Slobodan Milosevic. It is quite significant that the military, too, is looking increasingly like a police force, with snatch squads in the Balkans who have, so far, brought 15 war criminals to justice in the Hague.

WAR AS RISK MANAGEMENT

But world governance is not world government. The New World Order (NWO) vision in fact has long yielded to a reluctant acceptance that we live in a Global Disorder that can be "managed". The world is not to be made safe for democracy. Instead the world is to be made safe for the democracies themselves. We are no longer as interested as we were in building a democratic world.

For all the talk of "evil" and the rhetoric of the War on Terror, we are not in the business of redeeming the world from evil, but managing a variety of "evils" such as transnational organised crime, disease and environmental degradation. We have names for them: "The War on Crime"; "The War on Drugs"; "The War on Terrorism" and even (though it is not invoked as much as it once was), "The War on Poverty". The difference is striking: instead of forging a NWO, we are more interested in risk management. This too is another illustration of the way in which war has elided into *security*.

159 Cited Tim Edmunds, "Shifting military roles in Europe", *International Affairs*, vol. 82, issue 6 (2006): 1059–75.
160 Ibid.
161 Christopher Coker, *Humane Warfare* (London: Routledge, 2001).
162 Jürgen Habermas, *The Divided West* (Cambridge: Polity, 2006).
163 For a discussion of Schmitt's work see Hans Joas, *War and Modernity* (Cambridge: Polity Press, 2003) pp. 178–79.

If war as defence in the 20th century was addressed to threats, war as security in the 21st is addressed to risks. What is the difference between a threat and a risk? A threat is real in the sense that 40,000 Soviet tanks across the Elbe constituted a "clear and present danger". A risk is a possibility. When it becomes a probability we have to act, usually through pre-emption. Look at the *National Security Strategy* (2006). Section 3 focuses on the defeat of terrorism; section 5 on the risk of nuclear proliferation. Both advocate pre-emptive strategies: "The greater the threat, the greater the risk of inaction and the more compelling the case for taking anticipatory action".

Our armed forces are accordingly being restructured to deal with risk management. The mass conscript armies of the era of war as defence have given way to expeditionary forces in the era of war as security. NATO as an organisation has gone in for risk-targeted policing, as have police forces at home, where they provide concentrated surveillance and presence at high risk locations, and at high risk times. See, for example, the rise in the UK of blitzes on drink-driving and random alcohol checks. Both are *risk-focused patterns of policing*. In the case of security, NATO's *Operation Active Endeavour* surveyed up to 59,000 vessels in the Mediterranean between 2001 and 2005.[164] The US 6th Fleet now has a presence in the Gulf of Guinea, and we have stopped North Korean ships at sea. The military is generating (with the Intelligence Services) knowledge which is shared with other security agencies. It is now performing a *security-knowledge brokering function*. The role of Special Forces in gathering information puts the military in a network of intelligence gathering.

The military is being restructured accordingly. The US Marine Corps has been experimenting with "infestation" tactics that might radically change ground warfare. The US army is currently modularising its force structure, moving from 10 divisions up to 48 stand-alone battalion combat teams of up to 4,000 men each. The thrust of this transformation is to form quickly deployable, self-contained, self-sustaining brigades that can be rendered multi-functional for modularity. The Marine Corps calls it, "plug in and play". Martin Libicki has proposed rotating in the field for months or years at a time autonomous nodes in a larger network, pop-up units, similar to land mines. If you tread on them, they pop up, but only briefly.

Even technology is catching up. There is a new interest in "appropriate technology" – not the grand standing weapons systems deployed by army divisions but electronic shields and signal jamming devices; hand-held drones for reconnaissance; robotic remote control bomb disposal units; UAVs to track individual enemies and individual vehicles.

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164 European Parliament, *EU and NATO: Co-operation or Competition* (Policy Department, External Policies, October 2006), p. 17.

One last word. Risk is part of the contemporary world. It is important because it singles out countries or people that constitute risks, even though they may never offend. But it is an abstract technology capable of many functions. It does not help us deal with the political challenges that give rise to so many of today's security challenges. We need to put politics back into security. War as security encourages us, by contrast, to see war as yet another instrument of risk management. The point is that the Cold War by contrast was based not only on analyses of enemy capabilities, but also enemy intentions. It required us to read motivations, and motives. The preventive wars that we fight today, by comparison, pay little attention to the circumstances or character of regimes. They imagine offenders as criminals who faced with an opportunity can be counted on to take it.

Risk management also makes us accountable for our own carelessness. It plays up what insurance companies call "contributory negligence". We are the ones who make it easy for the criminal. Hence the critique of Clinton's three day Cruise missile barrage of Iraq (Operation Desert Fox 1998), which we now know neutralised all that was left of Saddam Hussein's weapons of mass destruction programme. We did not know this at the time, of course, and Clinton was held to blame for the fact that military action had eventually to be taken in 2003.

Of course, there is no inherent reason why the language of risk should not be used to reintroduce politics into the equation (to put us back in touch with intentions, not just capabilities). Recently at home criminologists have succeeded in marrying risk to more traditional social and behavioural science forms of criminology by translating the old causes of crime into *risk factors*: inadequate parenting, low self-esteem; poor social skills. By such means, the rehabilitative agenda of crime prevention (tough on the causes of crime) has been married to being tough on crime. War as security does not have to be what it has become.

STRUCTURAL FITNESS OF THE STATE

Ironically, the War on Terror has highlighted the extent to which the state can no longer secure its citizens in their beliefs, let alone material circumstances. Indeed, we are beginning to ask questions about what sociologists call the state's "structural fitness for war".

In the war as defence era it was assumed that states would mobilise society. In deterring war, this was taken as a given. The implications of this were often discussed especially in the early years of the conflict. To take one example from the early writings criticising what became a Cold War orthodoxy, Cord Meyer, a retired marine officer, published an article in the June 1947 issue of *The Atlantic* entitled "What Price Preparedness?" (the preparedness that James rightly assumed was what war had become). He went on to elaborate on

what was involved in the strategy of "peace through preparedness for war". The United States, he predicted, would have to maintain "the world's largest arsenal of atomic bombs, radioactive poisons, disease-producing germs and long-range rockets and bombers". Industrial and population centres would have to be dispersed and underground shelters built so that "the country may be able to fight on though its cities lie in ruins". It would be necessary to guard against "atomic sabotage" by creating "the most efficient intelligence system in the world", as well as "a very large security police armed with sweeping powers to search and arrest". The irony then would be that in preparing for their showdown, the United States and the Soviet Union would become alike: like the latter the US would become a regimented state. Its leaders, of course, would have to "exaggerate the points of difference" between the two societies as a means of persuading their respective populations of the moral value of their sacrifice. The conclusion, for Meyer, was inescapable. "Total preparedness means totalitarianism for American citizens … they will become mere instruments of the state".[165]

This never happened. Nor is it going to happen in the War on Terror for all the fear of diminishing civil liberties.

One of the best ways to appreciate the future is to read novels, for novelists sometimes have a more penetrating insight into our world than do most political scientists.

One such novel is *Virtual Light* by William Gibson, the man who is credited with inventing the term "cyberspace" in 1973. Since then he has become one of our leading science fiction writers. In his novel Gibson takes us into a networked world in which the state has surrendered power to global corporations. At their head is Dat-America which operates a surveillance system above the Earth which tracks the world's terrorists day and night. His dystopian vision of the future offers us the underside of globalisation as we are beginning to experience it today: a world in which the social reality of the rich is utterly different from that of the poor. The rich live in video-monitored fortresses. Outside the public space is occupied by the poor, and defended by force of arms. The world is divided between what Manuel Castells calls "the information rich" and "the information poor". The poor quite literally have been "switched off". They are useless on a labour market geared increasingly towards the production, processing and consumption of information.[166]

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165 Cited Iriye, "War as Peace, Peace as War", p. 49.
166 William Gibson, *Virtual Light* (New York: Bantam Books, 1993). At the meeting of the Gorbachev Foundation, San Francisco 1995, the members agreed that at some point in the twenty-first century only two-tenths of the world's active population would be necessary to sustain a world economy (Michel-Rolph Trouillot, *Global transformations : anthropology and the modern world* (New York/Basingstoke: Palgrave Macmillan, 2003), p. 56).

Gibson is extrapolating from the present. This is what all science fiction writers do; they take present trends and project them into the future. His universal surveillance system is based on the Global Information Infrastructure Project launched by Al Gore when he was vice president. The new challenges (the "universe of potentials out there" – to quote Tom Ridge) are ones we monitor every day. Surveillance is a trademark of the risk societies we have become.

And there are other features of Gibson's world which might strike a chord with his readers. The top 1 per cent of the world's population now earns as much as the bottom 57 per cent and it is not surprising that the public spaces – or "pre-modern" enclaves in the First World, or the "pre-modern" societies outside it, breed violence. Gibson's world is also one in which growing inequality leads to many conflicting orders – a world of undifferentiated jurisdictions between global corporations, drug cartels, militant nationalists, and above all, terrorists. States have a hard time proving their relevance to the emerging pattern of insecurity which dominates everyone's lives.

None of us seem to be very secure either in our immediate circumstances or our belief in the future. The extent of our present anxiety is captured by another novelist, James Blinn. "What am I afraid of?" asks a character in one of his books, a pilot on an American aircraft carrier heading towards the Gulf in the First Gulf War, the first conflict in history to be televised in real time:

> I'm afraid of everything. You think war scares me? It does but so does nuclear winter and fallout from Chernobyl and legionnaires disease and killer bees … and crude nuclear devices, and strip-mining, and the vanishing rainforest, and AIDS … and rising interest rates and falling interest rates and people with accents and Third World population growth … and botulism and E-coli and unnamed Amazonian viruses, and the little petro-skin floating on my coffee.[167]

The hero of Blinn's novel is a vivid example of a man who does not feel secure in himself, and certainly not the world around him. He is frightened by everything, what we call "hard" and "soft" security issues alike. He does not distinguish between them, even if we do. And he may well be right. For whether something is "soft" or "hard" is largely a matter of perception, not objective reality, and security today is based increasingly on subjective beliefs.

He is insecure, in part, because he no longer trusts the nation state to secure him, his interests or even his beliefs. Once the most formidable political unit devised, now we have to draw a distinction between national security and homeland security, between the security of the state, and the security of the citizen, between aggression from another state and aggression from other citizens

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167 James Blinn, *The Aardwark is Ready for War* (London: Anchor Press, 1997), p. 278.

in far distant parts of the globe. National security still relies on military defence, including SDI shields. But how do you secure your citizen against everyday risks which involve other "wars" – the "war against terror", the "war against crime", the "war against AIDS"? How can a space based anti-ballistic missile shield protect the citizen from crime when criminal gangs can operate almost without impediment across 6,000 miles of frontier, and 300 points of entry through which 500m people passed in 2001?

No wonder in this kaleidoscopic security environment private security has become a growth industry. Ten years ago, only four US universities offered courses devoted to disaster management. Today 115 degree courses are available and a further 100 are under consideration. On the internet you can find 24-hour status alerts against terrorism, and emergency supplies of potassium iodine for those who fear running short during a nuclear attack. The idea of self-help reminds me of the adverts in the early 1960s for "deluxe fallout shelters" for middle class families, offering every consumer comfort including wall-to-wall carpeting, lounge chairs and the latest state-of-the-art TV. Sold to the public as a family room during peacetime and a fallout shelter should war break out, it offered the consumer protection against nuclear war providing you could pay the price. Here, wrote Herbert Marcuse in his book *One Dimensional Man*, was the introduction of consumerism into death, an issue traditionally outside the range of consumer choice. In an age when consumers have been empowered as never before, but citizens seem even more at risk, Marcuse's irony sees somewhat out of place.[168]

This is something of a shock for those of us brought up to take for granted that one of the main features of the nation state was its monopoly on violence, and that the state's monopoly on violence was also a central feature of modernity. States may be relatively safe (for now) from attacks by other states, but their citizens are not. The burden of risk management, from the jurisdiction of institutions to the individualised sphere of personal decision making, has produced a shift in social experience, i.e., new and increased levels of individualised risk. Perhaps, it could be argued, we were at much greater risk during the Cold War when our societies could have been eliminated in the space of half an hour. The threat was more existential than the risks we face today.

Yet the Cold War did not impact much on our social life. One of those who recognised this early on was George Orwell, prescient as ever, in his novel *1984*. In his book the three totalitarian states that manage the world ask nothing of their citizens but obedience. It is the purest form of Hobbes' social contract. The state offers them total protection. For the one thing, Hobbes reminds us in

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168 Herbert Marcuse, *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Societies* (Boston: Beacon Press, 1991).

The Leviathan, what states cannot ask of its citizens is that they go off and fight for their country. The social contract is grounded on an absolute right to life. In Orwell's dystopian vision, states provide their citizens with everything, from social welfare to state-sanctioned pornography. Only one of them puts them at risk by dropping bombs on their heads to remind them that they are at war. The war itself, however, is merely an excuse to retain power.

In our age states now share the security burden with others. They share it with their citizens in neighbourhood watch schemes, do-it-yourself security schemes; they share it with non-government organisations (on which they rely for war as nation building); they share it with private security companies to distribute risks and share costs.

Indeed, states find themselves in an invidious position. On the one hand we expect them to secure us against risks we once took for granted, such as obesity and heart disease. On the other, we do not trust them to secure our person. The state can protect itself, but it is not always best placed to protect the nation. The upshot has been the rise of a neo-feudal order which should not be seen as a regression to a pre-modern – or early-modern state – but as the next phase of modernity. Just as security should be seen as the next phase of war.

WAR AS ZERO SUM

What is new about our own era is that we have also learned that there are costs to scientific progress that often outweigh the benefits. We do not have an easy Enlightenment belief in progress. We are increasingly fearful of the consequences of our own actions and have been since the invention of nuclear weapons in 1945.

Take terrorism which in its current manifestation is largely the consequence of our own technological success. Within four years of the Wright brothers taking to the air in 1903, a Russian terrorist, Boris Savinkov, designed a plane that could be packed with explosives and crashed into the Winter Palace. Only a few years later a silent movie showed a terrorist's aerial attack on the dome of St Paul's Cathedral. By then the Irish Fenians had already succeeded in exploding two bombs on the London underground. The new underground tunnels, claimed *The Times*, offered "vast possibilities of destruction". London had to wait another century for the possibilities to be fully realised.

And the consequences of our actions have no time limit. They can carry on across generations. As a result we need unprecedented circumspection and immense power of foresight when going to war. The post-modern ethical imperative is that we must take responsibility for the consequences of our actions. In the case of war, we are beginning to find it has side effects which cannot be predicted, only managed once they arise. Unfortunately, the side effects can be worse than the problem we are trying to address.

Drawing on games theory Robert Wright explains how history over the past 5,000 years has woven people into a vast web of global interdependence or complex networks. Whatever aids complexity tends to be non-zero. What threatens it tends to be zero-sum. For us war is increasingly zero-sum for that reason.

As Wright explains, war has played its part in this development, strange though this might appear on first reading. We tend to think of war as zero-sum because soldiers get killed in battle. There is usually a victor and a loser. But even in war (wars fought between states, wars fought for instrumental ends), there is a non-zero sum dynamic. Clausewitz identified it in the dialect between absolute and limited wars which reduced its zero-sum "elements", and made peace possible. He was right without having any understanding of anthropology or pre-history. For what the historical record shows is that the less complex a society is (hunter/gatherers who dominated 97 per cent of human history), the greater the death rate. The more complex a society, the death rate tends to go down.

But the dynamic of war and complexity is more subtle than this. As Wright adds:

> To put this dynamic of cultural evolution in the Darwinian language of natural selection, what it is "selected for" is larger and larger expanses of non-zero sameness but one of the main selectors is the zero-sum dimension of war. In that sense, waging war, in the end, is waging peace.[169]

When a society is conquered it often ends up adopting the system of the conquerors. This was the great success of the Romans compared with the Greeks. They discovered that citizenship was a "force multiplier". They offset their limited manpower by offering the Italian confederate cities citizenship in return for service in the legions.

There is something else which inheres in imperialism. Kant called it *asocial sociability;* it is part of the complexity of life. He was describing what makes us peculiarly human; we all have programmed into us a desire for honour, status and power. Without these asocial qualities (which are far from admirable in themselves), we would never have developed. In war, the drive for status widens our circle of acquaintance, and the status we crave increasingly over time turns into a wish to be respected. Kant talked of history's "cosmopolitan purpose" – an inner dynamic that over time, and not without detours made the world a more secure place. What he eventually perceived in this hidden plan was the end

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169 Robert Wright, *Non-Zero: The Logic of Human Destiny* (New York: Vintage, 2001), pp. 63–64.

of war. Evolutionary biologists such as Steven Pinker have seen the same dynamic at work, especially in terms of how our circle of acquaintance continues to expand. We can glimpse a cosmopolitan plan if we wish to in globalisation, and the need in our increasingly networked world for global legitimacy when exercising power. It is this logic of non-zero sumness that inheres in our humanity. It is the logic by which complexity is aided through communication.

This is not – I repeat – to suggest that there is a linear purpose in history. Indeed, there have been numerous setbacks on the way. This development is neither "necessary" for humanity, nor inevitable, nor pre-determined. And it is certainly not teleological – there is no master plan of a master creator, or "hidden hand" that can be detected in the history we have experienced so far. Even globalisation could be arrested, if probably not reversed, were we to plunge into an economic crisis as serious as the Great Depression. Still, while recognising that the development I have sketched is historically contingent, one can argue it represents a historical *trend*. War is becoming increasingly zero-sum.

So does war have a future? Though there is some reason to suspect, though not predict, that the 20th century may be the last in which it is practised by developed states against each other provided that the trajectory or direction towards greater complexity is not derailed, the wars likely to be fought will emerge from complexity itself. For us, conditions have changed dramatically, and for those for whom they have changed, the violent option, as Azar Gat reminds us in his recent book *War and Human Civilisation*, the hammer in the human behavioural toolkit, has become less practical. There are more peaceful tools to hand that have been growing in significance for a century or more. At the same time, however, most of humanity is still going through the process of modernisation while some societies have failed so far in their efforts to modernise at all.[170]

And there is something more. We return to technology in this case the internet. It nurtures communities of interest which cross dangerous fault lines: the boundaries of religion, nationality, ethnicity and culture. It sustains movements such as al-Qaeda. It produces virtual communities of hate and religious extremism. A paradox of our times, writes Wright, is that some of the players in globalisation especially those involved in terrorism and transnational organised crime, are playing emphatically zero-sum games. They have interests quite opposed to society at large. The spatial dimension of zero sumness has begun to contract, stimulating blind hatred of whole peoples, separated geographically by oceans. It has created a spaceless hatred or enmity, a virtual one.

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170 Azar Gat, *War in Human Civilisation* (Oxford: Oxford University Press, 2006), p. 328.

NEW WORLD ORDERS?

This raises important questions about how we might re-conceptualise the way in which force can be used to provide security for ourselves, for our beliefs, for our values.

War as defence involved balances and equilibriums. We have moved from an age of equilibrium to one of outcomes.

Economists themselves have been taken to task for continuing to see (in Robert Solow's words) equilibrium as the fundamental canonical hypothesis of economics. In stark contrast the most important characteristic of capitalist market economies is change, and this is the very essence of the system. It is the economic system itself that generates the forces which incessantly transform it. Indeed, the Austrian School believes that no equilibrium position is ever achieved. In terms of equilibrium concept all prices, for example, are disequilibrium prices. In the market process, information is discovered, adjustments made and resources shifted to try to keep up with changing conditions. Unless there is an omniscient auctioneer who controls the market and establishes the point of equilibrium, transactions must take place at "non-equilibrium" prices. The market process results in outcomes – in this case high or low inflation. But no economy can ever be inflation free.[171]

Evolutionary change in the economic process is driven from behind rather than pulled ever closer towards a fixed goal. At any moment we can say such-and-such will be the *outcome*. It is misleading to call this outcome "equilibrium". This implies that if this outcome does not come about, the forces involved will maintain it, or if it moves away, there are forces to restore it. And this all pre-supposes, of course, that maintaining equilibrium is desirable in itself.

The same logic (I would contend) applies to security. There is no equilibrium (a classic balance of power or security order, let alone a New World Order, a concept that we have, for the moment, disowned). There is only a series of outcomes which we address more or less successfully. A classic case of success was Afghanistan in the spring of 2002 when a modest investment of bribes, and the massive application of air power, allowed the Northern Alliance to expel the Taliban from the country. Since then, the West has committed itself to maintaining an order in Afghanistan which is beyond its power.

Afghanistan can be seen as a complex adaptive system consisting of many different political units, each doing its own thing, obeying certain rules that govern its behaviour. The units of the system include drug lords, warlords and local politicians. The behaviour of the system is the collective result of each individual unit using its own initiative in the context of established rules. By at-

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171 Andrew Karmarck, *Economics for the C21st* (London: Ashgate, 2001), p. 17.

tempting to change the system by "democratising" the country, the West hopes to change its behaviour.

It has found by trial and error that it has much less knowledge of how the system works than the local players. Those who have more knowledge tend to adapt faster. They survive and even thrive. They not only use knowledge, but they use it to pursue creative initiatives as the Taliban is doing.

The study of complex adaptive systems shows us that many types of change have remarkably little effect on behaviour. But computer modelling also shows that sometimes a very small change in the rules can cause a massive change in behaviour. How do you get there? By finding leverage factors – finding the right leverage is the most difficult task of all. Examples in other areas include anti-trust laws which can have a major effect on capitalism's tendency towards creating monopolies; vaccines in the bloodstream which when injected can trigger an immune system to produce enough antibodies to make us immune to a particular disease. Another example is the initiatives taken in Kerala province post-1989 to teach poor women to read. Within a decade the provincial government had achieved a literacy rate almost as high as that of the developed world. The solution was to give the peasants readings that related exclusively to their situation: hunger, poverty, safe drinking water. It was an initiative based on the notion of the Brazilian educator Paulo Freire in the 1970s that immediate problems in people's lives provide the best teaching materials.[172]

The solution in Afghanistan is to identify what leverage factors may exist to advance a security outcome in Afghanistan. It is probably the best we can achieve. The West has to address immediate problems: the local, and not focus its attention, as it has, on the government in Kabul.

I conclude with an anecdote told by Arthur Ransome (the author of *Swallows and Amazons*, a typical English story of boys messing about in boats). But Ransome was also a foreign office official in 1919 who toured Eastern Europe trying to find out what ethnic group the locals identified with, the thrust of Western policy being self-determination. On coming across a group of peasants in Galicia he asked the head man whether they were Ruthenians, Little Russians or Poles. The man had never heard of the groups. Do you think of yourself as Orthodox Christians, Ransome persisted, as opposed, for example, to Catholics or Protestants in the west. The headman replied: "We are local".[173] They were whatever it was safe to be; their identity was determined for them by others, the baron in the castle on the hill, later the Nazi Gauleiter, later still the Soviet official. History has not changed in much of the developing world. Yet we are

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172 James Martin, *The Meaning of the Twenty First Century* (New York: Riverhead Books, 2006), p. 61.

173 Cited Zbynek Zeman, *Pursued by a Bear: the Making of Eastern Europe* (London: Chatto & Windus, 1989), p. 21.

still making the same mistakes Ransome's generation made 70 years ago. We still tend to forget that security is local. War alas, is an imperfect instrument for micro-management.

CONSOLIDATING PEACE IN THE AFTERMATH OF WAR – REFLECTIONS ON "POST-CONFLICT PEACE-BUILDING" FROM BOSNIA TO IRAQ

by Mats Berdal[174]

INTRODUCTION: "NEW INTERVENTIONISM" OR "NEW WARS"?

Any attempt to step back and survey the post-Cold War period as a whole – to single out features that set it apart from earlier eras in the history of modern international relations – would surely reveal, as one of its most striking characteristics, the widespread practice of external intervention undertaken with the express aim of building "sustainable peace" *within* societies ravaged by war and violent conflict.

Such "post-conflict" interventions, it is true, have assumed a variety of forms and have involved different constellations of actors, institutional sponsors and sources of legitimising authority.[175] They have differed sharply in terms of political context and in the degree to which local populations and elites have embraced the foreign presence. In Kosovo, Afghanistan and Iraq, efforts to consolidate peace came in the wake of major combat hostilities initiated and led by Western powers. In Cambodia and Bosnia Herzegovina, they followed the entry into force of ambitious, though still fragile and tenuous, internationally sponsored peace agreements. In yet another set of circumstances, they have grown out of what were initially more limited peace-keeping endeavours, as has been the case in Liberia, Sierra Leone and the Democratic Republic of Congo (DRC). The intensity of commitment on the part of the intervening authority has also varied greatly, from skeletal provisions for electoral and human rights monitoring in Central America in the early 1990s to full-fledged governance over

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175 The term "post-conflict" to describe the kind of operational settings and challenges discussed in this paper is, as should become apparent, deeply problematic. This explains why I have retained the inverted commas throughout. The term appears destined to stay, however. This explains, in part, why I have not sought to replace it. That said, a degree of terminological inexactitude is unavoidable in dealing with this subject and Hugh Seton-Watson's exculpatory plea in the introduction to one of his works seems appropriate here as well. Acknowledging that "the attempt" to make sense of his chosen subject "undoubtedly lacks neatness", he added that this was "inevitable because the subject itself is not neat". Hugh Seton Watson, *Neither War nor Peace: The Struggle for Power in Post-War World* (London: Methuen & Co, 1960), p. 13.

large swathes of territory, as in East Timor and Kosovo. The practice has also been highly selective. Since the mid-1990s, south-eastern Europe has with some justification been described as one large "peace-building laboratory" where a long-standing, if by now scaled down, UN presence has been complemented by five OSCE missions, two EU police missions, one large-scale NATO stabilisation force in Bosnia (replaced in December 2004 by an EU military operation) and another in Kosovo (KFOR). Similarly, Haiti has been host to no fewer than four UN missions since the threat of an American invasion forced the departure of the military junta from the country in 1994. By contrast, other regions and countries – Burundi in the years immediately following the Rwandan genocide in 1994 provides a telling example – have received far less, if any, attention from the international community.

Important as these differences are, common to all these interventions is a level of ambition *qualitatively* different from UN field operations during the Cold War. Nor is there much in the history of the League of Nations – an organisation whose innovative aspects and activities, especially in the 1920s, have tended to be overshadowed by its ultimate demise – to compare in scale and ambition with the post-Cold War international commitment to reengineer and reshape societies by means of an external presence.[176] For all their understated variety, UN peace-keeping activities during the Cold War remained, with only a few notable exceptions, limited to the mitigation and containment of violent conflict. As a general rule, they involved the deployment of lightly equipped military and civilian personnel whose task it was to reduce and control levels of violence by means *other* than enforcement. By contrast, under the broad but ill-defined rubric of peace-building, the aim of external involvement in the post-Cold War period has been couched in far more ambitious terms: to support "political, institutional, and social transformations necessary to overcome deep-seated internal animosities and strife."[177] The sheer level of ambition here is striking and, in important respects, the suggestion that contemporary peace-

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176 League of Nations activities that would have been covered by the UN's broad definition of "peace-building" include its role in administering the Saar and the city of Danzig, its involvement in large-scale refugee repatriation Russia in 1920–21, and the efforts undertaken to address the consequences of continued violence between Greece and Turkey in 1922–26. The League also established a Minorities Section and undertook a series of investigations aimed at resolving disputes between states.

177 Michael Doyle, Ian Johnstone and Robert Orr, "Introduction" in *Keeping the Peace: Multinational UN Operations in Cambodia and El Salvador*, eds M. Doyle, I. Johnstone and R. Orr (Cambridge: Cambridge University Press, 1997), p. 2. Doyle, Johnstone and Orr made the observation in respect of the UN's Cambodia operation in 1992 and 1993, but it accurately captures the broad aim and aspiration of other missions.

building has sought to "compress into a few years evolutions that have taken centuries" contains more than a grain of truth.[178]

Until the attacks on New York and Washington D.C. in September 2001, efforts to account for this "new interventionism" in Western academic and policy discourse had attached special significance to the decisive influence of normative developments in international relations since the end of the Cold War.[179] Indeed, the prominence given to the protection of basic human rights, establishing the rule of law, and democracy promotion as *drivers* for intervention were seen by some as evidence of an emerging "solidarist consensus" in international relations and as an ever wider commitment to the tenets of liberal internationalism.[180] While the 1990s unquestionably saw an increase in external involvement precipitated by humanitarian concerns – with the NATO-led operation in Kosovo in the spring of 1999 the apotheosis of this development – to explain the pattern of post-Cold War intervention in war-torn societies solely or even primarily by reference to changes in normative context was never entirely convincing.[181] The inevitable and often uneasy coexistence of altruistic motives with interest-based and power-political considerations of intervening powers and coalitions of states was always there, though it has become more acute and has been brought into much sharper relief since the events of September 2001 and the subsequent wars in Afghanistan and Iraq. Appreciating the admixture of motives that prompts outside involvement in war-shattered countries is obviously critical to any understanding of both the diversity of interventions and the uneven record of achievement.

Whatever the complexity and shifting character of motivations, however, the general trend that provides both the broad context and the justification for this chapter is unmistakable: neither the peace-keeping failures of the early and mid-1990s, in Somalia, Rwanda and Bosnia, nor the changes in the strategic environment spawned by the events of "9/11" and their aftermath, have weakened a trend which has seen "a continued increase in international peace-building in

178 Renata Dwan and Sharon Wiharta, "Multilateral peace missions: challenges of peace-building", *SIPRI Yearbook 2005* (Oxford: Oxford University Press, 2005), p. 146.

179 James Mayall, ed., *The New Interventionism, 1991–94* (Cambridge: CUP, 1997). A substantially revised and expanded edition of this book, taking account of the continuing growth of UN peace-keeping and peace-building activity in the intervening period, was published in 2007. See Mats Berdal and Spyros Economides, *United Nations Interventionism* (Cambridge: CUP, 2007).

180 Nick Wheeler, *Saving Strangers: Humanitarian Intervention in International Society* (Oxford: OUP, 2003).

181 For an overview and discussion of humanitarian concerns as triggers of intervention, see Adam Roberts, "Humanitarian Issues and Agencies as Triggers for International Military Actions" in *Civilians in War*, ed. Simon Chesterman (Boulder, CO: Lynne Rienner, 2001), pp. 177–97. An excellent assessment of contemporary patterns of intervention in world politics, striking a careful balance between interest-based and normative motivations, is also provided by Neil MacFarlane, *Intervention in Contemporary World Politics,* Adelphi Paper 350 (Oxford: OUP for IISS, 2002).

the face of the enormous practical and legitimacy challenges".[182] Indeed, if anything, interest in the subject – whether it is measured in terms of new missions or in the institutional provisions increasingly made for "post-conflict", "peace-building" or "stability" operations within the decision making machinery of states, international organisations or among armed forces – has intensified, most notably since 2003. Since then, an increase in the size and number of missions with a peace-building mandate has been particularly pronounced on the African continent, with new deployments and existing ones significantly expanded in Sierra Leone, Liberia, Côte D'Ivoire, Burundi and the DRC.[183] In Afghanistan, NATO has sought – since 2003 through its leadership of the International Security Assistance Force (ISAF) and, in 2004 and 2005, with the establishment throughout the country of provincial reconstruction teams (PRTs) – to expand the reach and effective control of central government and to "facilitate development and reconstruction".[184] Since May 2003, a US-led international coalition has been engaged in a violent struggle in Iraq, the declared objective of which has been to create "a democratic and sovereign nation, underpinned by new and protected freedoms and a growing market economy".[185] Paralleling these developments, a large number of Western governments have either created new bodies or re-organised the machinery of central government concerned with foreign, defence and development policy to better support "post-conflict" peace-building activities.[186] The armed forces of these same countries have shifted much of their operational and doctrinal focus towards "stability operations" and, more generally, towards the creation of expeditionary or out-of-area projection capabilities designed for such missions.[187] A range of international organisations, whether functional in orientation as with the Bretton Woods family of institutions, or regional entities such as the European and African Unions, have similarly expanded, redefined or updated their mandates to address and make institutional

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182 Renata Dwan and Sharon Wiharta, "Multilateral peace missions: challenges of peace-building", *SIPRI Yearbook 2005* (Oxford: Oxford University Press, 2005), p. 167. According to SIPRI, 58 multilateral peace missions (i.e. under the auspices of either the UN, a regional organisation or an *ad hoc* coalition), involving nearly 300,000 military and civilian personnel worldwide, were being conducted in 2005. SIPRI, *SIPRI Yearbook 2006* (Oxford: Oxford University Press, 2006), p. 158.

183 See Sharon Wiharta, "Peace-building: the new international focus on Africa", in *SIPRI Yearbook 2006*, pp. 140–63.

184 NATO, "NATO After Istanbul", NATO Public Diplomacy Division, n.d.

185 "Testimony of General John Abizaid, Commander CENTCOM, before the Senate Armed Service Comt. 25 September 2003", *GlobalSecurity.org*, 25 September 2003 (online 17 Apr 2007), p. 4.

186 A prime example of this is the creation in 2004 of the Post-Conflict Reconstruction Unit (PRCU) in the UK, which has sought, with mixed success, to coordinate policies across government ministries.

187 While medium-sized powers, notably the UK and France, still strive for a self-contained expeditionary capability, smaller NATO countries have modernised and restructured their forces to fit in more easily with larger multinational formations.

provisions for "post-conflict" activities.[188] As if to underline the trend, one of the few concrete outcomes of the UN World Summit in September 2005, widely considered to have been both innovative and badly overdue, was the creation of the Peace-Building Commission (PBC) and an associated Peace Support Office.[189]

In terms of the overall theme of this book – to wit the newness or otherwise of contemporary wars – the *level of ambition* exhibited by the international community (specifically the *transformative* element) is indeed "new". Whether the wars that have received such unprecedented attention from the international community are themselves new is much less obvious. If anything, and as will be argued more fully, the notion of "new wars"– insofar as it posits a radical discontinuity between current and earlier forms of warfare and, more generally, discounts the relevance of historical experience to present-day operations – is positively unhelpful to an understanding of the contemporary challenges posed by the consolidation of peace in the aftermath of war.

STRUCTURE AND ARGUMENT IN BRIEF

The full and unfolding implications for governments and international organisations of the trend in favour of more intrusive and ambitious post-war interventions are beyond the scope of this chapter. The focus of interest here is more restrictive, though the canvas is wide. Drawing upon the experience of operations from Bosnia to Iraq, the chapter is concerned with the nature of the challenges presented by "post-conflict" environments for any outside military-cum-civilian force engaged – with limited resources and for what is necessarily a limited period of time – in "peace-building". The chapter and the argument proceed in three parts.

The first concerns the concept of "post-conflict peace-building" itself, both as it appears in the wider peace-building literature and as it is routinely used by international organisations, governments and much of the NGO community. In brief, the argument advanced is that the term, while ubiquitous and seemingly here to stay, is so vague as to deprive it of any real value as an analytical category. It expresses a noble aspiration but provides no meaningful guide to the kinds of the challenges faced by countries emerging from protracted armed conflict. In particular, it offers no indication as to the strategic priorities that an international presence needs to establish in the early and critical phase of a

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188 The World Bank established a Post-Conflict Reconstruction Unit in 1997. In 2005, the EU alone was conducting 11 "peace missions" while international efforts, arising out of commitments made by the G-8 and the UN at its World Summit of September 2005, were also underway to strengthen the capacities and resources of the African Union. For details see SIPRI, *SIPRI Yearbook 2006*, p. 155.

189 United Nations General Assembly, *2005 World Summit Outcome, A/Res/60/1, 24 October 2005* (online 30 May 2007).

peace-building mission. As such, the term, most unhelpfully, serves to conceal rather than illuminate the tensions (and the resulting policy dilemmas for any intervening force) that invariably exist between long-term and more immediate peace-building objectives.

The second part of the chapter turns to the nature of the "post-conflict" environment itself. The range and variety of operations since the early 1990s make generalisation and *direct* comparison between cases inherently problematic. That said, the record of operations also points to certain *contextual categories* or fundamental issues that, irrespective of location, will need to be understood and addressed by *any* outside force operating within a war-torn society. Thus viewed, the challenges faced by American forces in Iraq since the spring of 2003 – high levels and multiple sources of insecurity, the struggle to imbue its intervention with political legitimacy, re-building state capacity, the difficulties of providing local communities with essential services – are present, while obviously not to the same degree, in all post-conflict settings.[190] The chapter dwells on four contextual categories: the question of political end-state; historical context and psychological climate; insecurity and violence; and the political economy of war and peace. Each of these may be seen as raising key questions about the wider context of a given operation and the answers given to these serve, in effect, to spell out the limitations and the possibilities of outside intervention in a peace-building capacity.

Making this argument more explicit, the final and concluding section turns to the specific tasks faced by outside forces in the early and critical postwar phase alluded to above. In this period, three priority tasks, all intimately connected, stand out: providing a secure environment, stabilising governing structures and ensuring the interrupted flow of basic, life-sustaining services. Driving activities in support of these aims should be an overriding concern with the building of *legitimacy*, both for the intervening force itself and for the administrative and governance structures on whose proper functioning the consolidation of peace depends. Building legitimacy in turn requires a deep understanding of the contextual categories outlined above and the way in which these come together to shape and define the "post-conflict" environment. It is the lack of such understanding which, above all, has too often doomed peace-building endeavours to ineffectiveness.

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190 This point is also acknowledged by Hilary Synnott, regional coordinator for the Coalition Provisional Authority (CPA) in southern Iraq for six months in 2003, who has argued that "the experience acquired by those who dealt with ... Haiti, Somalia, Kosovo, Bosnia Sierra Leone, East Timor and Afghanistan, has much in common with that gained in Iraq." Hilary Synnott, *The Coalition Provisional Authority in Southern Iraq,* unpublished paper, 2005, p. 5. The paper is an extended version of Hilary Synnott, "State Building in Southern Iraq", *Survival*, vol. 47, no. 2, Summer (2005).

THE CONCEPT OF "POST-CONFLICT PEACE-BUILDING"

Definitions, it has been wisely suggested, "are best worked towards, not stated at the outset" since "any definition involves terms which themselves have to be defined, and so *ad infinitum* – and infinite tedium".[191] Certainly, the study of international relations is replete with terms and concepts that are necessarily contested, and discussions about their true meaning can all too easily acquire an overly introspective and self-referential character. No doubt, it is sometimes "better to establish what one is talking about by doing the talking first".[192] Even so, basic distinctions and working definitions often do need to be made, if only to delineate more precisely one's focus of enquiry. Moreover, exploring the origins and widespread use of certain terms is usually also illuminative of wider trends, and, crucially, it may help lay bare unspoken assumptions about a subject which, on closer inspection, turn out to be questionable and problematic. For all three of these reasons, "post-conflict peace-building" – a vague and all-encompassing term around which an academic industry has grown up – merits further reflection.

The term was first introduced in *An Agenda for* Peace, an influential though overly sanguine attempt by Boutros Boutros Ghali to explore the implications of the passing of the Cold War for the UN. The then Secretary General defined the term broadly to cover "action to identify and support structures which will tend to strengthen and solidify peace to avoid a relapse into conflict".[193] The concept has remained closely associated with the UN and is now treated as one of its core functions in the peace and security field. A survey of activities loosely subsumed under the term features annually in the Secretary General's Report on the Work of the Organisation and the concept has been the subject of numerous, often interminable, debates in the General Assembly and Security Council.[194] The UN definition has remained exceedingly broad, covering "integrated and coordinated actions aimed at addressing the root causes of violence, whether political, legal, institutional, military, humanitarian, human rights-related, environmental, economic and social, cultural or demographic".[195] Crucial to the UN understanding of the concept is also the insistence that actions in these widely different spheres are "mutually reinforcing".

For an organisation long shackled by Cold War rivalry and with a membership that reflects more accurately than that of any other body the global

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191 Philip Windsor, "The Future of Strategic Studies", unpublished paper, n.d., p. 1.
192 Ibid.
193 United Nations, *An Agenda for Peace*, Report of the Secretary-General, a/47/277-S/24111, 17 June 1992, paragraph 21.
194 See, for example, United Nations, Press Release SC/8395, Security Council 5187th Meeting, 26 May 2005 and United Nations, Presidential Statement, S/PRST/2005/20.
195 United Nations, *Report of the Secretary-General on the Work of the Organization – 1998*, A/53/1, paragraph 65.

inequities and socio-economic disparities in the international system, the UN definition conveys a profound and laudable aspiration: to shift the focus of attention and operational activity away from simply the alleviation of violent conflict to something altogether more positive and proactive. It is an aspiration that is also implicit in much of the peace-building literature, especially that which has grown out of peace and conflict studies.

From both an analytical and policy-making perspective, however, this expansive understanding of "post-conflict peace-building", and the implied challenge that it poses for external actors, suffers from two major weaknesses.

First, as Elisabeth Cousens has perceptively noted, the catch-all definition used by the UN and recited, too often uncritically, in the literature, presents the analyst and the policy-maker with a "melange of goals, conservative and ambitious, short- and long-term, that remain relatively undifferentiated, let alone considered in strategic relationship with one another."[196] In UN documents, statements of government ministers and, above all, in the language of non-governmental organisations, the term is virtually synonymous with the "entire basket of post-war needs" in countries and societies emerging from violent conflict.[197] What is missing, in short, is any sense of priorities; any sense that the long list of desirable and, in their own right, entirely justifiable peace-building goals may be anything but mutually reinforcing in the short to medium term.

Second, approaches to peace-building – whether in a UN context or in the peace-building literature – have displayed a marked tendency to abstract the tasks of peace-building from their political, cultural and historical context. All too often, the result has been an ahistorical and essentially static view of the challenges posed by outside intervention in war-torn societies and a consequent failure to appreciate the variety of ways in which the past shapes and imposes limits on what outsiders can realistically achieve. Crucially, this has also meant that external actors have frequently failed to appreciate the degree to which their own actions, policies and historical baggage necessarily contribute to shaping the "post-conflict environment", whether through the stirring of nationalisms, the legitimisation or de-legitimisation of indigenous power structures, or by empowering or disempowering what are, for better or worse, key local actors. The sources of this deficiency – namely to dehistoricise and depoliticise the subject – are multiple and beyond the scope of this chapter, though it may be noted that the influence of modern social science methodology, specifically in its positivist, rational choice variety, have often served to reinforce the social engineering approach that has dominated the discourse and practice of peace-build-

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196 Elizabeth M. Cousens, "Introduction", in *Peace-building as Politics: Cultivating Peace in Fragile Societies*, ed. Elizabeth M. Cousens and Chetan Kumar (Boulder, CO: Lynne Rienner Publishers, 2001), p. 10.
197 Ibid., p. 7.

ing. One consequence of this is that vital insights provided by other disciplines, notably history and anthropology (specifically the branch of anthropology concerned with violence and war), have not received sufficient attention from either policy-makers or analysts concerned with the challenges of outside intervention in other societies.

A More Restrictive Definition of Peace-building

A first step, then, in assessing the challenges presented by efforts to consolidate peace is to be more precise about the definition and understanding of "peace-building". The experience of the past fifteen years suggests that a basic distinction – blurred in the peace-building literature, though admittedly hard to define in practice – needs to be drawn between the *critical* phase that follows the immediate end of major hostilities and/or the early phase of implementing a peace accord, and the longer term issues and challenges posed by rebuilding war-torn societies. The major contribution of outside military forces will be in the first of these two phases, when, in effect, the long-term outcome of intervention may be said to hang in the balance. While the Brahimi report of 2000 defined "peace-building activities" as those "undertaken on the far side of conflict,"[198] the focus here is on the other end of the spectrum: that is, when levels of insecurity are high; when violence is latent and pervasive; when institutions are rudimentary, weak or non-existent, and when the very distinction between war and peace is blurred. As indicated above, this period may, and often does, follow in the *immediate aftermath* of violent conflict, be it in the wake of a military invasion, in support of a fragile settlement or ceasefire, or to shore up a peace-keeping operation that has gone (or is in the process of going) awry.[199] Even so, the period in question cannot be defined in purely temporal terms with the implication this usually carries of a *sequential* approach to taskings by external actors. Nor should the period be understood in purely negative or risk-filled terms: it should be seen as a unique kind of political space, shaped by fatigue, uncertainty and war weariness but also by the hope that a new political dispensation will result in rapid improvements to the quality of life. This combination of elation and fear, of hope mingled with deep uncertainty about the future, were both aspects of the psychological climate on the ground in Kosovo in April and May 1999 and, again, in Iraq in the spring of 2003.

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198 United Nations, *Report of the Panel on United Nations Peace Operations*, A/55/305, paragraph 13.

199 In one sense, therefore, the use of "post-conflict" here is closer to that employed by the Post Conflict Reconstruction Unit (PRCU) set up by the UK government in 2004 than it is to the aforementioned use of the term by UN bodies and agencies. For the PRCU, "post-conflict" covers the "situation immediately after conflict, where there is a need for recovery and stabilisation to restore essentials and do the groundwork for long-term stability."

Concentrating on this critical period allows for a more precise focus than that captured by the term "post-conflict peace-building". This is not the sole reason, however, for distinguishing between phases and for prioritising objectives accordingly. It is also the case that the long-term outcome of an external intervention – ultimately, its success or failure – is determined during this period, as it provides the crucial opportunities for getting things right or badly wrong.[200] It is the period when the trade-offs and the difficult and tough policy choices arise, when expectations are high but when the best may also be the enemy of the good. This imposes upon policy makers the need to set priorities and choose between options that, more often than not, are in conflict with one another. The trade-offs arise from the tension that necessarily exists in conflict-ridden and fractured societies between the requirements of security and political stability in the short term, and policy objectives considered vital to long-term stability. The latter range from issues related to the administration of "post-conflict" justice, the disarmament, demobilisation and reintegration of armed factions and efforts to combat and undercut organised crime in zones of conflict, to the broader aims of democratisation and economic liberalisation. The former include, more narrowly, physical security, creating and stabilising administrative and governance structures and meeting the basic and life-sustaining needs of local populations, objectives all geared towards keeping peace alive or a fragile "peace process" afloat. There is no question that in the long run, economic development, the institutionalisation of rule of law and respect for human rights and the spread of democracy will reduce the chances of renewed conflict; the policy challenge lies in reconciling these objectives in the early stages of an operation with the more immediate tasks of stabilisation. Trade-offs and awkward compromises between these sets of objectives simply cannot be avoided, however much UN documents and government communiqués may insist on the "mutually reinforcing" character of *all* peace-building objectives. The truth is that, in the short run, the vigorous pursuit of long-term peace-building objectives, however desirable, has often

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200 Again, this is at odds with the position found in some of the peace-building literature. Taisier M. Ali and Robert Matthews, for example, introduce a series of African case studies with the observation that "the success or failure of peace-building is not likely to be determined in the two to three years that follow a negotiated settlement". The view taken here is that while success may not be determined during this period, post-Cold War experience suggests clearly that failure may. Taisier M. Ali and Robert O. Matthews, eds, *Durable Peace: Challenges for Peace-building in Africa* (Toronto: University of Toronto Press, 2004).

proved conflict generating rather than conflict mitigating.[201] To state this is not, of course, to reject the values of liberal internationalism that have provided an important impetus behind the growth of peace-building activity since the early 1990s, nor is it to deny their crucial role in providing the regulative ideas and in setting the broad directions of policy. It does, however, challenge what Leszek Kolakowski has described as a "certain innate optimism", characteristic of liberal philosophy, that has also permeated liberal discourse on the peace-building; an optimism that consists "in the attitude of tending to believe that there is a good solution for every situation and not that circumstances will arise in which the available solutions are not only bad, but very bad".[202]

DEFINING THE "POST-CONFLICT" ENVIRONMENT

From Bosnia to Iraq, Cambodia to Liberia, individual "post-conflict" settings all possess their own unique characteristics and distinctive features. This is an important, though often neglected, truism that should stand as a warning against the tendency for organisations, governments and analysts to approach the "post-conflict" challenges in terms of easily transferable templates or universally valid planning assumptions.[203] Saying this, however, does not imply that there is no scope for comparison between conflicts, nor, more specifically, that thinking about "post-conflict" environments cannot usefully be aided by employing contextual categories that cut across different cases. Properly identified, these provide a framework for thinking or approaching the challenges faced by external actors in a "post-conflict" environment. Four sets of issues are identified here:

- the question of political end-state
- historical context and psychological climate
- violence and insecurity
- the political economy of war and peace

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201 Holding multiparty elections early on in a "post-conflict" environment has often brought these dilemmas and trade-offs into focus, showing that the *process* of democratisation, as opposed to democracy itself, can prove deeply disruptive and violent. "Post-conflict" or "transitional" justice is another area of outside policy intervention where hard choices have had to be made. In southern Sudan and northern Uganda, for example, the provision or prospect of amnesties has enabled peace processes to stay afloat under otherwise inauspicious circumstances.

202 Leszek Kolakowski, "The Self-Poisoning of the Open Society", in *Modernity on Endless Trial* (Chicago: Chicago University Press, 1990), p. 163.

203 It has been argued, for example, that the rough ride initially encountered by the UN Transitional Administration in East Timor (UNTAET), established in October 1999, was a result in part of mistaken and inappropriate planning assumptions borrowed from the UN Mission in Kosovo (UNMIK), which had been launched less than half a year earlier. See, *A Review of Peace Operations: A Case for Change* (London: Conflict, Security and Development Group, International Policy Institute King's College London, 2003), p. 216.

These categories are, plainly, all closely connected: the high levels of insecurity and multiple sources of violence that characterise "post-conflict" settings cannot be understood in isolation from the political economy of that conflict. Likewise, the psychological environment that distinguishes a "post-conflict" setting is partly, sometimes largely, a function of a specific historical context. Even so, the categories are relevant across different cases and, for that reason, merit separate treatment. It also needs to be stressed that a deeper understanding of the contextual factors will not necessarily provide clear-cut answers to or obvious policy implications for an external force, or for policy-makers contemplating intervention. Indeed, the opposite will often be the case. As Jeremy Black has noted about the uses of history, there is a critical distinction to be drawn between history as providing "answers" and "history as questions offered by scholars alive to the difficulties and dangers of predicting outcomes".[204]

The Question of Political End-State

The challenges presented by the consolidation of peace in the aftermath of war are crucially determined by the character, depth and durability of the political settlement that brought the active phase of war to an end. The nature of that settlement varies greatly and may severely limit the scope for any outside presence to secure lasting peace.

The UN Operation in Eastern Slavonia from 1996 to 1998, overseeing the transfer of Eastern Slavonia from Serb to Croatian government control, is often held up, especially by those involved in the operation, as a true success story. Its success, however, owed largely to the fact that the political end-state was never in doubt: Croatia was reasserting full sovereignty within an agreed period over a piece of territory temporarily occupied by the Krajina Serbs.[205] The UN operations in East Timor, from 1999 through 2002, were also similarly blessed with an unambiguous political end-state: full independence for East Timor from Indonesia.[206] While both operations saw violence and experienced real difficulties on the ground, the wider political context meant that the role of the outside presence was always, if not straightforward, imbued with a critical advantage. By contrast, the continuing uncertainty surrounding the future status of Kosovo – where the Security Council resolution establishing an international presence in the province after NATO's military campaign in 1999 left the political end-state of the province unresolved "pending final settlement" – explains why the history

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204 Jeremy Black, *Rethinking Military History* (London: Routledge, 2004), p. 242.

205 A fair and balanced assessment, touching on the problem of measuring success, is provided by Derek Boothby, "The Political Challenges of Administering Eastern Slavonia", *Global Governance*, vol. 10, no. 1 (2004): 37–51.

206 For a concise and thoughtful treatment of the UN's involvement, see Simon Chesterman, "East Timor", in *United Nations Interventionism, 1991–2004*, eds Mats Berdal and Spyros Economides (Cambridge: Cambridge University Press, 2007).

of the UN mission in Kosovo (UNMIK) is a more troubled one in spite of the exceptional powers given to it.[207] It also explains why the prospect of renewed violence in the province is very real.

Edward Luttwak's mischievous way out of the dilemma presented by the uncertainty surrounding the political end-state of an ongoing conflict – to "give war a chance" – is an option that governments for good reason, especially when it carries with it the risk of large-scale population displacement and massive violations of human rights, find increasingly difficult to contemplate.[208] Indeed, as indicated above, in the post-Cold War period it has often been the very prospect of such violations, or the readiness *post facto* to deal with their consequences and prevent their recurrence, that has prompted outside intervention in the first place. The upshot in many cases, however, has been that international forces have too often found themselves saddled with mandates that reflect awkward political compromises and pressures, and that do not address what, in the jargon, constitute the "root causes" of the conflict. The resulting difficulty for the military component of such an international presence – whether under UN or any other auspices – has been just how to translate inchoate mandates into realisable military objectives. This, in essence, is what bedevilled the UN force in Bosnia from 1992–1995. It is also at the heart of the difficulties faced by what is currently the largest and most ambitious of all UN peace operation: the efforts of some 16,000 peacekeepers to consolidate peace in the Democratic Republic of Congo (DRC).

In Iraq and Afghanistan the question of political end-state appeared, to some at any rate, to have been settled by the removal of Saddam Hussein in 2003 and by the routing of the Taliban regime in 2001. In reality, the absence of a clear political strategy and the resulting uncertainty about the future order of things and the basic legitimacy of existing governance structures, continues to provide a critical backdrop to developments in both theatres.

Historical and Psychological Context

For an outside force to operate with any likelihood of success in "post-conflict" societies, sensitivity to the historical and cultural setting and reflexes of those societies is indispensable. Indeed, the complexity of local politics and society that, from Cambodia to Iraq, has confronted and more often than not bewildered external actors is unintelligible without a proper historical perspective. This, to many, will appear as an obvious truism, hardly meriting separate treatment. Yet,

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207 See Spyros Economides, "Kosovo", in *United Nations Interventionism, 1991–2004*, eds Mats Berdal and Spyros Economides (Cambridge: Cambridge University Press, 2007).

208 Edward N. Luttwak, "Give War a Chance", *Foreign Affairs*, vol. 78, no. 4, July/August (1999).

it is striking just how absent, beyond the superficial and glib acknowledgement that "history matters", the significance of complex historical legacies has been from the deliberations of Western governments contemplating interventions in societies which, while fractured, divided and traumatised by war, possess a profound sense of their own history and cultural worth, and whose basis of social order may differ sharply from theirs. This is true in the obvious and straightforward sense in which it is now frequently brought up in relation to Iraq, where the US-led invasion of 2003, whatever the mixture of motives that underlay it, powerfully stirred up a sense of Iraq nationalism that continues to fuel the "insurgency" and the resistance to foreign occupation.[209] As Larry Diamond, having observed the occupation at close quarters during a period with the Coalition Provisional Authority in Baghdad, witnessed in 2005

> … although most Iraqis were grateful for having been liberated from a brutal tyranny, their gratitude was mixed with deep suspicion of the US's real motives; … humiliation that the Iraqis themselves had proved unable to overthrow Saddam; and unrealistic expectations of the post-war administration … Too many Iraqis viewed the invasion not as an international effort but as an occupation by Western, Christian, essentially Anglo-American powers, and this evoked powerful memories of previous subjugation and of the nationalist struggles against Iraq's former overlords.[210]

This inability to gauge the impact of foreign intervention on Iraqi soil was compounded by a more disturbing and fateful unwillingness to engage with Iraqi society on its own terms. Charles Tripp, recalling a meeting arranged for the benefit of Prime Minister Tony Blair in November 2002, has noted, damningly, how the Prime Minister at the time "seemed wholly uninterested in Iraq as a complex and puzzling political society".[211] It was an impression confirmed by other attendees at the meeting, a select group of academics brought together to discuss, with the Prime Minister and his Foreign Secretary, Jack Straw, the future of Iraq. The wealth of memoir literature and insider accounts which now also exists on the US preparations for and conduct of operations after the fall of Saddam Hussein, reveals a similar lack of interest in Iraq itself among key actors charged with planning post-war operations.[212] Indeed, for the key civil-

209 Toby Dodge, *Iraq's Future: The Aftermath of Regime Change*, Adelphi Paper 372 (London: IISS/Routledge), p. 11.
210 Larry Diamond, "What Went Wrong in Iraq", *Foreign Affairs*, September/October (2004): 5.
211 Charles Tripp, "Militias, Vigilantes, Death Squads", *London Review of Books*, 25 January (2007): 30.
212 Toby Dodge, "How Iraq Was lost", Review Essay, *Survival*, vol. 48, no. 4 (2006–07): 157–171.

ian staffers around Donald Rumsfeld at the Pentagon most closely involved in "post-liberation" arrangements, notably Paul Wolfowitz and Douglas Feith at the Office of Special Plans, ignorance of Iraqi society was seen as a virtue in that it allowed them to treat the country "as a blank slate, to be remade in the image of its liberators".[213]

Anthropologists and historians, deeply familiar with societies in which the international community has been engaged in a peace-building capacity over the past decade, have also drawn attention to more subtle ways in which history casts long shadows over contemporary developments, and especially how these may help to explain enduring patterns and forms of violence.

One, comparatively well-researched case, is that of Somalia, a country where more than a dozen internationally sponsored peace and mediation attempts since the debacle in the streets and alleyways of Mogadishu in 1993 have manifestly failed to deliver stability in the south of the country. As Ken Menkhaus has persuasively shown, the reason for this stems largely from a failure to tailor peace-building initiatives to the historical and cultural specificities of Somali society; specificities that include a deep suspicion of central government, an innate sense of superiority shared by all Somalis and the vital and continuing importance of clan and kinship affiliations to the workings and understanding of Somali politics.[214] Similarly, the civil wars that erupted in West Africa in the 1990s and the attempts to restore peace in their aftermath cannot be divorced from what Stephen Ellis has termed the "*longue durée* of West African history," including the pre-colonial history of relations and the socio-political imbalances that have long existed between coastal-based elites and peoples of the interior.[215] Among the range of "historical factors" that, according to Douglas Johnson, help explain modern Sudan's almost continuous history of civil wars are both "patterns of governance" inherited from Sudanic states prior to the nineteenth century, and a "particular brand of militant Islam" introduced in the nineteenth

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213   Ibid.: 161. As if this was not bad enough, Rajiv Chandrasekaran, in his account of life in Baghdad's Green Zone, has shown how ignorance of Iraq was also seen as an asset when it came to the recruitment of staff for the Coalition Provisional Authority in Iraq. Rajiv Chandrasekaran, *Imperial Life in The Emerald City: inside Baghdad's Green Zone* (London: Bloomsbury Publishing Plc, 2007), especially pp. 101–105.
214   See Ken Menkhaus, *Somalia: State Collapse and the Threat of Terrorism*, Adelphi Paper 364 (Oxford: OUP, 2004) and, more recently, Ken Menkhaus, "Governance without Government in Somali", *International Security*, vol. 31, no. 3 (2006/07). For the difficulties that outsiders have had in dealing with Somalia on its own terms in recent times, and its consequences, see also Ioan M. Lewis, *A Modern History of the Somali,4th edition* (Oxford: James Currey, 2002), pp. 262–311.
215   Stephen Ellis, "Liberia's Warlord Insurgency" in *African Guerrillas*, ed., Christopher Clapham (Oxford: James Currey, 1998), p. 169.

century.[216] Of modern Afghan history, Amin Saikal has observed that "*any* government or official political movement … whatever its proclaimed goals and position on the left-right continuum, recruited, mobilised support and operated according to criteria of ethnic/tribal/clan solidarity", and that "political conflicts … have stemmed from the attempts of dominant communally based elites to accomplish a high degree of centralisation of power with help of foreign patrons".[217] The contemporary relevance of these realities is plainly evident in the record of outside efforts to bring stability to Afghanistan since 2001, just as the dynamics and the recurring patterns of violence in Somalia, West Africa and Sudan must be placed within their wider historical context.

Precisely because historical experience and the meaning with which is it imbued by different societies are so varied, it is difficult to draw simple conclusions under this heading, except to reinforce James Mayall's observation that the past "will continue to constrain and shape developments" in the present, and that for this reason there will always be "a limit to what can be done by social engineering".[218] The generalised character of this conclusion does not make it any less profound or pertinent.

The past also powerfully plays into what may be described as the *psychological climate* that characterises any "post-conflict" setting, whether that past involves a history of subjugation, conflict and glory, or indeed as is often the case, a combination of all three.[219] Larry Diamond's aforementioned observation in relation to Iraq usefully draws attention to key elements which have shaped the psychological environment of all "post-conflict" settings alluded to in this chapter: suspicion of the motives of outside forces; a sense of humiliation and heightened expectations about what peace will bring. While Iraq presents a special case, it is not unique. The sense of humiliation and vulnerability experienced by local populations, coupled with unrealistic expectations about an immediate peace dividend is a recurring feature of "post-conflict" settings, and

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216 Douglas H. Johnson, *The Root Causes of Sudan's Civil Wars* (Oxford: James Currey, 2003), p. xviii and pp. 1–7. It may be noted here, that the failure to place contemporary conflict in a proper historical context is particularly striking in relation to Africa. This applies, not least, to the debate about the so-called "new wars" of the post-Cold War era. For an excellent and extended discussion of this, see Dominique Jacquin-Berdal, "How New are Africa's 'New Wars'?: A Historical Sketch", unpublished paper, 2005.

217 Amin Saikal, *Modern Afghanistan: A History of Struggle and Survival* (London: I.B. Tauris, 2006), p. 9.

218 James Mayall, "The Legacy of Colonialism", in *Making States Work: State Failure and the Crisis of Governance*, Simon Chesterman, Michael Ignatieff, Ramesh Thakur (Tokyo: United Nations University Press, 2005), p. 57.

219 In particular, as Paul Richards has noted about the findings of ethnographic case studies, "war and violence echo in collective and individual memory for generations". Paul Richards, "New War: An Ethnographic Approach", in *No War No Peace: An Anthropology of Contemporary Armed Conflicts*, ed., Paul Richards (Athens: Ohio University Press/Oxford: James Currey, 2005), p. 14.

it makes for a psychological climate that is volatile and often evolves rapidly in the early phase of a "post-conflict" operation.[220] When such expectations are not satisfied – as they can never fully be – anger and frustration often translate into increased violence and instability.

Violence and Insecurity

Post-war societies subject to outside intervention and "post-conflict peace-building" since the early 1990s have typically witnessed high levels of violence after the formal end of conflict. In several cases, most notably again in Iraq, levels of violence have been significantly higher in the post-war phase than during the war itself.[221] El Salvador and Guatemala – interesting in part because both now routinely figure as success stories in the peace-building literature – have also witnessed exceptionally high levels of social violence since the formal end of civil war in 1992 and 1996 respectively.[222] Similarly, Haiti, subject to numerous peace-building operations over the past decade, has been plagued by endemic violence.[223] Such violence in turn breeds fear and a deep sense of insecurity about the future. It undermines faith in governing structures and encourages the search for alternative solutions, including exile (especially among middle and professional classes), organised crime and vigilantism. While the observation that "post-conflict" societies are often deeply violent is not itself new, much less attention is given to the logic and functions of violence in such societies. Indeed, the shorthand description of "post-conflict" environments as "anarchic", "collapsed" or "chaotic" is revealing of an undifferentiated approach to the central problem of violence. This is of more than academic interest as the task of restoring and providing security requires an understanding of the varieties and sources of violence, but also of how they overlap, interact and sometimes merge. Three categories of violence merit special mention (a more detailed discussion of each is not possible within the confines of this chapter):

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220 Studies of recent operations have also drawn attention to the so-called "golden hour" that exists after the end of major conflict and the initial phase of an intervention; "a time frame", according to Jones, Rathmell and others, "of several weeks to several months, during which external intervention may enjoy some popular support and international legitimacy". Seth Jones, A. Rathmell, J. Wilson and K. J. Riley, *Establishing Law and Order after Armed Conflict* (Santa Monica, CA: Rand Corporation, 2005), pp. xi–xii.

221 "Iraq death toll 'soared post-war'", *BBC*, 29 October 2004 (online 18 Apr 2007).

222 Kees Koonings and Dirk Kruijt, ed., *Armed Actors: Organised Violence and State Failure in Latin America* (London: Zed Books, 2004), pp. 156–58; Andrew Redding, "Human Rights in Guatemala Since the Signing of the Peace Accords", Report for U.S. Department of Justice, October 1992 (World Policy Institute [online 18 Apr 2007]).

223 David Malone and Sebastian Einsiedel, "Haiti" in *United Nations Interventionism, 1991–2004*, eds Mats Berdal and Spyros Economides (Cambridge: Cambridge University Press, 2007), p. 185.

(i) *Political Violence and the "settling of scores"*. The formal end of armed conflict, especially if reached through a negotiated settlement, rarely entails a clean break from past patterns of violence, nor does it mean that the grievances which gave rise to conflict in the first instance have been entirely removed. Given this reality, politically inspired violence is always likely to survive into the post-war period. Indeed, it may well be argued that several of the peace accords signed and formally bringing internal armed conflicts to an end in the 1990s – including the Bicesse Accords for Angola in 1991 and the Arusha Accord concluded by the government of Rwanda and the Rwandan Patriotic Front in August 1993 – provided evidence not so much of "comprehensive political settlements", which is how they were presented to the outside world, but of unfinished civil wars. Under such circumstances, post-conflict violence may assume the form of score-settling as well as continued attempts at political annihilation of opponents. But is also likely to be perpetrated by those who have enjoyed privileges and are threatened by any new political dispensation; notably the security services.[224]

(ii) *Opportunistic and Organised Criminal Violence*. The complete or partial absence of functioning law and order institutions that often characterises societies emerging from war and protracted periods of violence does much to explain why criminal violence – both of an opportunistic and organised kind – so often flourishes in "post-conflict" settings.[225] If, as is usually the case, "peace" also involves releasing large number of soldiers from military controls into an environment where the opportunities for legitimate income generation and employment are strictly limited, the result is usually a sharp increase in levels of criminal violence. This is especially so in those cases where soldiers are drawn from a pool of young unskilled men (including children), and it explains why disarmament, demobilisation and reintegration (DDR) activities have, by force of circumstance, assumed such prominence in contemporary peace operations. The challenges posed by surplus and formally demobilised soldiers after war is not, of course, a new phenomenon; the kinds of problems it generated in early modern Europe, for example, bear a striking similarity to some contemporary post-war settings.[226] A further – and in the immediate post-war phase more serious – challenge is posed by elite formations and special units, often associated with security and military intelligence apparatuses. These come in many guises: spe-

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224 According to Toby Dodge, writing in 2005, remnants of the Ba'ath party security services in Iraq accounted for "60 % of the politically motivated violence in the country". Toby Dodge, *Iraq's Future: The Aftermath of Regime Change*, Adelphi Paper 372 (London: IISS/Routledge), p. 15.

225 Again, according to Dodge, writing in 2005, "organised crime accounts for 80 % of the violence in Iraq". Dodge, *Iraq's Future*, p. 15.

226 See Julius R. Ruff, *Violence in Early Modern Europe, 1500–1800* (Cambridge: CUP, 2001), pp. 64–66.

cial militias, paramilitary forces, police units and intelligence outfits of various kinds. Because these have previously enjoyed a privileged status and, crucially, have had access to instruments of coercion, knowledge and economic resources, they are enormously important to "post-conflict" stability. While such formerly privileged groups and/or individuals are often drawn into organised crime in "post-conflict" states, as hinted above, their motives are difficult to distinguish from more overtly political agendas.[227]

(iii) *Historically and Culturally Embedded Forms of Violence.* Exploring the necessarily complex relationship between culture and violence is not only deeply sensitive but also fraught with danger.[228] Yet an appreciation of the historical roots and cultural context of violence is still necessary for an understanding of many contemporary forms of violence. While the attempt to do so is not of course tantamount to condoning or justifying violence, it "may involve the hard lesson that violence can have a different kind of legitimacy in other cultures that our own".[229] In the case of the West African wars in the 1990s, to take but one example, Ellis has pointed to the "revival or reinvention of traditional sodalities that once played an important role in governance, that are still widely regarded in rural areas especially as having socially legitimate rights to inflict or regulate violence, and that in current circumstances are being reformulated in the form of private armies or militias in the service of various national politicians."[230] More generally, violence has often played a distinctive role in the political life of some of the societies into which Western forces have intruded, including Iraq, Haiti and Congo; a role which fits poorly with the modern Western conception of violence as strictly regulated and as having no place in politics and the political

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227   For an illuminating case study of the complex relationship between "security, political economy and crime" and their relationship to "post-conflict" developments, see Peter Andreas, "The Clandestine Political Economy of War and Peace in Bosnia", *International Studies Quarterly*, vol. 48, no. 3 (2004).

228   As Neil Whitehead has noted, instead of a proper "cultural context that acknowledges the history and autonomy of other cultures … media commentary, government policy and military intervention" have often been given "a pseudo-anthropological spin by blanket reference to 'tribalism', 'savagery', and the 'primitiveness' of the perpetrators". Neil L. Whitehead, "Terrorism, Ethnic Conflict and The Culture of Violence", *Communique,* vol. 11, Spring (2002).

229   Ibid. For a fuller exploration of the notion that "violent practice might be integral or fundamental to cultural practice", see essays in Neil L. Whitehead, ed., *Violence* (Santa Fe: School of American Research Press/Oxford: James Currey, 2004). See also Stephen Ellis, "Violence and History: a response to Thandika Mkandawari", *Journal of Modern African Studies*, vol. 41, no. 3 (2003): 457–75.

230   See Stephen Ellis, "Interpreting Violence: reflections on West African Wars" in *Violence*, ed. Neil L. Whitehead (Santa Fe: School of American Research Press/Oxford: James Currey, 2004), p. 120.

processes.[231] Making sense of "post-conflict" violence cannot be divorced from an understanding of the roles that violence has historically played and continues to play within certain societies, without *essentialising* it by implying that it is somehow inherent to a society or population.

The Political Economy of War and Peace

The wars of Yugoslav succession, the Rwandan genocide and the eruption of civil wars in West Africa in the first half of the 1990s – all accompanied by atrocities and brutalities shocking to the liberal conscience – led to a strong emphasis, especially in journalistic reporting, on the "irrational and essentially inexplicably primordial qualities" of contemporary civil wars.[232] The best known account along these lines was provided by Robert D. Kaplan, whose experiences of war in West Africa led him to conclude that a new form of "criminal anarchy" was emerging as "the real 'strategic' threat" of our age.[233] Even some of the most thoughtful of analysts were inclined to describe the upsurge of violent conflict in parts of the world as beyond rational comprehension; as the "disappearance" of established structures into "hideous chaos"[234] or as "sheer chaotic anarchy… [arising from] the dissolution of society into something uncomfortably reminiscent of Hobbes's state of nature, the war of all against all."[235]

Against this, partly in response to what was seen as an excessive primitivisation of contemporary conflict but also in a genuine effort to understand why some wars tended to persist in spite of external efforts to resolve them, increased attention was in the latter half of the 1990s given to the role of economic motivations or agendas in the emergence and perpetuation of violence.[236] By examining the *functional utility* of violence to a wide range of actors – political elites, economic interest groups, ordinary people caught up in war and external

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231 One of three themes identified by Charles Tripp in his history of modern Iraq is precisely "the use of violence in political life" and its consequences for the nature of the state and of politics. Charles Tripp, *A History of Iraq* (Cambridge: CUP, 2000), pp. 6–7.

232 Michael Pugh and Neil Cooper with Jonathan Goodhand, *War Economies in a Regional Context* (Boulder, CO: Lynne Rienner, 2003), p. 97.

233 Robert D. Kaplan, "The Coming Anarchy", *Atlantic Monthly,* February (1994): 46.

234 Philip Windsor, "Strategic Thinking after the Cold War", in *Studies in International Relations – Essays by Philip Windsor*, ed., Mats Berdal (Brighton: Sussex Academic Press, 2002), p. 148.

235 Inis L. Claude, "The New International Security Order: Changing Concepts", *Naval War College Review*, vol. XLVII, no. 1, Winter (1994): 11.

236 For useful selection of essays on the subject see, Mats Berdal and David Malone, eds, *Greed and Grievance: Economic Agendas in Civil War* (Boulder, CO: Lynne Rienner, 2000), and Karen Ballentine and Jake Sherman, eds, *The Political Economy of Armed Conflict: Beyond Greed and Grievance* (Boulder, CO: Lynne Rienner, 2003). For the issues involved in the so-called "greed and grievance" debate see also Mats Berdal, "Beyond Greed and Grievance – and not too soon…", *Review of International Studies*, vol. 31 (2005): 687–98.

players that stood to gain from the persistence of armed conflict – the seemingly anarchic nature of war gave way, in many instances, to a more complex picture in which a series of vested interests in the continuation of violence coalesced into a distinctive war economy, usually forming part of a region-wide pattern of informal economic activity. While these war economies are costly and catastrophic for societies as a whole, and appear chaotic and senseless to the disinterested observer, they are often highly profitable for individuals and groups both within and outside the war-affected society itself.[237]

In true dialectal fashion, the effort to counter explanations stressing the irrational character of contemporary conflict led some – including social scientists taken in by the tidiness of rational choice theory and policy-makers seduced by mono-causal explanations of conflict – to an opposite and equally problematic position: that is, to reduce contemporary civil wars to a fight over lucrative natural resources sparked and driven *solely* by the predatory designs and actions of greedy, loot-seeking rebels and corrupt governments. In its crudest form, such greed-based explanations are no better that primordial ones for, as Ballentine and Sherman have persuasively shown, "economic incentives and opportunities have not been the only or even the primary cause of these armed conflicts; rather, to varying degrees, they interacted with socio-economic and political grievances, interethnic disputes, and security dilemmas in triggering the outbreak of warfare."[238] While the evidence shows that economic agendas play a more critical role in sustaining violence *once* war has broken out, the impossibility of neatly separating economic and political agendas remains. What is of interest to an understanding of the dynamics of armed conflict is the interaction between these agendas. It is the attempt to explore this interaction that constitutes, in essence, the *political economy* perspective on armed conflict.

What, then, is the relevance of this perspective to the understanding of the "post-conflict" environment and the challenges it presents to an outside force engaged in peace-building? Perhaps the single most important insight is that the distinction between "conflict" and "post-conflict", between war and peace, is anything but clear cut, and that transitions from war to peace are in fact, as Keen suggests, much better "seen as involving a realignment of political interests and a readjustment of economic strategies rather than a clean break from violence to consent, from theft to production, or from repression to de-

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237 For a particularly clear analysis of these processes at work, see David Keen, *The Economic Functions of Violence in Civil Wars*, Adelphi Paper 320 (Oxford: OUP/ISS, 1998).

238 Karen Ballentine, "Reconsidering the Economic Dynamics of Armed Conflict", in *Greed and Grievance*, eds, Karen Ballentine and Jake Sherman (Boulder, CO: Lynne Rienner, 2003), p. 260.

mocracy."[239] Armed conflict, in other words, should not be treated merely as the violent breakdown of a system, but also as the emergence of a new and "alternative system of power, profit and protection".[240] Such systems, moreover, are not closed, nor are they impervious to outside pressures and influences, but they possess a logic of their own which external actors have too often either failed to recognise or to factor into the design of their own policies. One illustration of this is the perverse impact of economic sanctions on both Slobodan Milosevic's Serbia and Saddam Hussein's regime in the 1990s. In both cases, sanctions had the effect of strengthening rather than weakening their respective bases of power; a development with profound consequences for subsequent "post-conflict" developments in both countries.[241]

Additionally, political economy approaches have shed light on other distinctive features of contemporary civil wars, many of which puzzled observers at first sight and are also deeply relevant to understanding "post-conflict" environments: the tendency for opposing parties in a war to acquire a converging interest in reaping the benefits of war and therefore to engage in co-operative behaviour rather than costly fighting and drawn-out battles[242]; the tendency, where economic gain and plunder assumes major importance, for armed factions to splinter and fragment into smaller groups and formations; and, above all, the tendency for civil wars to mutate and to acquire, often through links to transnational organised crime, transborder and transnational characteristics.[243] In all of this, appreciating how economic and political agendas interact is necessary to the identification, within war-affected societies, of deeper and informal power structures; sometimes referred to as the "shadow" or "dual" state, that

239 Keen, The *Economic Functions of Violence*, p. 32. For an attempt to substantiate this assertion with respect to two particular areas of external support – the disarmament, demobilisation and reintegration of combatants after conflict, and the restructuring of the "security sector" – see Mats Berdal and David Keen, "Violence and Economic Agendas in Civil Wars: Some Policy Implications", *Millennium: Journal of International Studies*, vol. 26, no. 3 (1997).

240 Berdal and Keen, "Violence and Economic Agendas in War": 797.

241 See Tripp, "Militias, Vigilantes, Death Squads": 30; Peter Andreas, "Criminalising Consequences of Sanctions: Embargo Busting and Its Legacy", *International Studies Quarterly*, vol. 49, no. 23 (2005): 335–60. See also, "Oiling the wheels of war: smuggling becomes the real economy of Iraq", *Guardian*, 9 June 2007.

242 "Winning", as David Keen notes, drawing in particular on his work on the war in Sierra Leone, "may not be desirable: the point of war may be precisely the legitimacy which it confers on actions that in peacetime would be punishable as crimes". Keen, *The Economic Functions of Violence*, p. 12.

243 For the trans-national characteristics of modern war economies see Mark Duffield, "Globalisation, Transborder Trade and War Economies", in *Greed and Grievance*, eds Karen Ballentine and Jake Sherman (Boulder, CO: Lynne Rienner, 2003), pp. 69–91. I have also discussed these features of contemporary civil wars in greater detail in Mats Berdal, "How 'New' are 'New Wars'? Global Economic Change and the Study of Civil War", *Global Governance,* vol. 9, no. 3 (2003), especially: 483–489.

is, the networks of "privilege and patronage where real power lies".[244] Without an understanding of these structures and networks, outsiders will grope in the dark and their actions will continue to produce perverse and unintended consequences.

CONCLUSIONS AND IMPLICATIONS: "POST-CONFLICT" OPERATIONS AND THE PROBLEM OF LEGITIMACY

If there is one overarching lesson from the decidedly mixed record of "post-conflict" interventions since the early 1990s it is that stability cannot be *imposed* on war-torn societies from the outside. In Hilary Synnott's phrase, stability has to be "elicited".[245] In part this is because political will among external actors is limited and there is no appetite for the kind of open-ended commitment which an attempt truly to *impose* peace would require; we are not in the business of building empires and the protectorates that have been set up in such places as Kosovo and East Timor were always intended to be of a temporary duration. But just as importantly, careful consideration of the contextual categories outlined above – the political realities, historical factors, psychological climate, logic of violence and political economy of conflict that together shape any "post-conflict" setting – will, invariably, reveal the limits to which stability can be *imposed* from the outside. How, then, is it to be elicited?

The key lies in the notion of *legitimacy*. The concept and workings of legitimacy – how to conceptualise or account for it, how to pin down its elusive quality – are of course central to the study and theorisation of politics. For the more limited purpose of the argument here, Ian Hurd offers a helpful definition as "the normative belief by an actor that a rule or institution ought to be obeyed … a subjective quality, relational between actor and institution, and defined by the actor's perception of the institution".[246] Hurd elaborates: "When an actor believes a rule is legitimate compliance is no longer motivated by the simple fear of retribution, or by a calculation of self-interest … control is legitimate to the extent that it is approved or regarded as 'right'."[247] In other words, legitimacy is not a fixed quantity of which one is either in possession or not, and in any society – in any relationship between rulers and ruled – it will co-exist to some degree with coercion or self-interest as "modes of social control".[248] It springs from, and is influenced by, a variety of sources and, crucially, when effectively

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244 Charles Tripp, "After Saddam", *Survival*, Autumn (2002). It was precisely the "networks of the 'shadow' state", Tripps notes, that had benefited from the sanctions on Iraq: 30.
245 Synnott, *The Coalition Provisional Authority …*, p. 5.
246 Ian Hurd, "Legitimacy and Authority in International Politics", *International Organization*, vol. 53, no. 2, Spring (1999): 381.
247 Ibid.: 387.
248 Ibid.

cultivated, it translates into authority. The relevance of these, seemingly abstract, considerations to the central focus of this chapter – that is, to the highly uneven record of efforts to transform societies by means of an external presence – should be obvious. Legitimacy is vital in two, closely related, senses.

There is, in the first instance, the issue of the perceived *legitimacy* of the outside force itself, a function of its conduct, identity and ability to meet local expectations. The success of any "post-conflict" intervention – whether it follows a coercive intervention, is in support of a negotiated peace accord or is designed to shore up a fledgling peace operation – requires constant attention to the legitimacy-enhancing effects, or otherwise, of its actions. Building legitimacy should serve as the lodestar for an external force, a guiding principle exercising a continuous influence on the activities of both the military and civilian sides of a mission.[249]

Second, there is the crucial issue of the perceived legitimacy of the governing structures that the outside force is helping to implant, nourish and consolidate. The relative success of post-conflict interventions depends, above all, on the degree to which, not only the activities undertaken by the intervening force, but also the structures of governance are viewed as *legitimate* by local parties, neighbouring states and, indeed, the wider international community.

While the importance of building legitimacy, when stated in these terms, appears obvious enough (and, indeed, is frequently acknowledged in mission statements), doing so effectively has proved difficult, and a chief reason for this has been the absence of a deep understanding of the contextual categories examined in this chapter. What enhances or undermines legitimacy must be established in relation to these categories, and it is the failure to do so – whether it is troops dangling their feet out of helicopters and showing the soles of their feet to Somalis in Mogadishu in 1993, or a failure to appreciate the political economy of conflict zones – which explains the uneven record of peace-building. This is another way of saying that knowledge of the historical, cultural and political context – and the degree of humility which such knowledge ought to induce – is a prerequisite for effective engagement by outside actors in war-torn societies. This, deceptively simple, point may be illustrated more clearly and in greater detail by returning to the early and critical post-war phase which, as suggested

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249 Failure to do so is the chief reason why, as Adam Roberts has recently argued, "Abu Ghraib was the beginning of the end of the US-led political project" in Iraq. Adam Roberts, "Torture and Incompetence in the War on Terror", *Survival*, vol. 49, no. 1 (2007): 200. For the manner in which the fortunes of different formations of the US army in Iraq, especially in the first year of occupation, were influenced by the attention given to this, see also James Fallows, "Why Iraq Has No Army", *The Atlantic Monthly*, December (2005): 9–10, and Thomas E. Ricks, *Fiasco* (London: Allen Lane, 2006). Larry Diamond, in his account of "what went wrong", also singles out the failure to "close the legitimacy gap". See Diamond, "What Went Wrong in Iraq": 5.

above, needs to be distinguished from the long-term peace-building tasks with which it is usually conflated in the peace-building literature.

In any post-conflict setting, three priority tasks present themselves to an external force: establishing a secure environment; stabilising governing and administrative structures and meeting basic, life-sustaining needs. Activities in support of these tasks are not sequential; indeed, they are mutually reinforcing and hard to separate in practice. As Synnott observed in southern Iraq, "there was an inextricable linkage between the security environment, progress over governance and reconstruction, and public perception" (for "public perception" here, read legitimacy).[250] Whilst stabilising governing and administrative structures is now recognised to be essential, it has proved one of the most persistently difficult of challenges. This is in large part because the attention of external actors has so often been misplaced, with the principal focus on systems of central government and the political life in the capital rather than on local and municipal, and in some cases regional, governance. There are three reasons why the focus on central government is problematic and often destabilising in the early phase of "post-conflict" operations. First, the organisation of central government raises the most politically contentious of issues and disputes over the format of elections, the formation of political parties and constitutional issues become, at best, a source of paralysis; more often than not, it deepens societal divisions and generates more conflict. Added to the difficulties of rebuilding central government is the reality that the centre, especially in the immediate aftermath of protracted conflict, is often viewed with deep suspicion and distrust outside the capital. Second, in the short term, the organisation of central government tends to be much less directly relevant to those whose immediate concerns are with security and the continued supply or revival of essential services, including water, food and power.

The third reason relates most directly to the contextual categories outlined above, especially that of historical context and the political economy of conflict. "Post-conflict" societies where the distinction between peace and war is blurred rarely, as was made clear earlier, collapse into complete anarchy: alternative systems of governance emerge, built around bonds of loyalty, trust and mutual interest at a local level, which, while they represent a form of adaptation to extreme circumstances, also have deep historical and cultural roots. Somalia over the past fifteen years, as Menkhaus has convincingly shown, provides a particularly striking example of a situation where a "mosaic of local polities and informal social pacts" has evolved to offer "some level of 'governance', if

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250 Synnott, *The Coalition Provisional Authority …*, p. 5.

not 'government'".[251] In Somalia, the greatest amount of change in terms of improved governance has been at the municipal and neighbourhood levels, though different degrees of "sub-national governance" have also emerged across the country, notably in the secessionist and unrecognised state of Somaliland.[252] And Somalia is not unique. According to Menkhaus, other case studies also show that:

> Communities that have been cut off from an effective state authority – whether out of governmental indifference to marginal frontier territories, or because of protracted warfare, or because of vested local and external interests in perpetuating conditions of state failure – consistently seek to devise arrangements to provide for themselves the core functions that the missing state is supposed to assume, especially basic security.[253]

Even where the collapse of the state is as complete and comprehensive as it was in Iraq in April–May 2003, efforts to restore stability and some degree of order often emerged spontaneously from the bottom up. As Synnott noted of his time in Iraq, "when local government institutions were not able to develop, governance itself became a battleground and people sought to gain the spoils of power by intimidation".[254] The challenge faced by an outside force in such circumstances lies in working with and not against the grain of local developments that favour stability, though to do so without rewarding intimidation and violence. One sobering conclusion drawn from Somalia and the myriad of attempts to form central government there since the early 1990s is in fact that "state building and peace-building can work against each other in the short term."[255] In Iraq, governance at the local level was fatally neglected – through

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251 Ken Menkhaus, *Somalia: State Collapse and the Threat of Terrorism*, Adelphi Paper 364 (Oxford: Oxford University Press, 2004), pp. 19–20.
252 Ken Menkhaus, "Governance without Government in Somali": 91–92. For an exploration of how politics, economic activity and governance have operated in the absence of formal government in Somalia, see also Peter D. Little, *Somalia: Economy without State* (Oxford: James Currey, 2003).
253 Menkhaus, "Governance without Government": 75. As Menkhaus acknowledges, for many anthropologists these are not new findings and this is one reason why some of them have also suggested that the contributions of ethnographic and anthropological work on armed conflict may precisely be to show that the "interests [of war affected peoples] might be better served by reform of *local* government and justice than a reconstruction of the state". See Paul Richards, "New War: An Ethnographic Approach", in *No War No Peace: An Anthropology of Contemporary Armed Conflicts*, ed., Paul Richards (Athens: Ohio University Press/Oxford: James Currey, 2005), p. 19.
254 Synnott, *The Coalition Provisional Authority …*, p. 13.
255 Menkhaus, "Governance without Government in Somali": 77. As noted elsewhere, outside intervention has tended only to reinforce the "worst instincts of Somalia's political and economic elites". Menkhaus, *Somalia: State Collapse,* pp. 82–83.

a lack of or inconsistency of policy – by the occupation authorities when, arguably, this was one of the few ways of halting the descent into violence once the existing administrative structures had collapsed.[256] With regard to the DRC, Zoë Marriage, echoing the findings from Somalia and Iraq, has similarly highlighted the importance for outsiders to support "local level developments that foster security" and to "engage with the informal economy" throughout the country, something which in turn would require – in this case, of the UN Mission there – a more "sophisticated understanding of how informal networks operate and the role of history, identity and religion in establishing codes of practice and hierarchies of priorities".[257]

Establishing such an understanding, let alone translating it into effective policy on the ground, is of course a great deal more easily said than done. Indeed, it is a formidable challenge and as such points to a final, overall, conclusion to emerge from these reflections.[258] While the commitment to intervene and to transform societies highlighted in the first section of the chapter do often reflect laudable motives and are sometimes too easily and too cynically dismissed as expressions of mere self-interest, the post-Cold War record is also a cautionary tale, calling for much greater humility and realism before the task than that which has typically informed the deliberations of Western governments. Above all, it needs to be recognised that in embarking upon peace-building one is, in reality, never faced with a "clean slate", that societies other than our own are complex but not unintelligible and, finally, that, for a variety of reasons, there are definite limits to what can be done by external means *alone* to transform or reengineer war-torn societies.

256 See International Crisis Group, "Iraq: can local governance save central government?", Middle East Report, no. 33, 27 October 2007. For an account of the general neglect of this level see also Synnott, *The Coalition Provisional Authority …*, pp. 25–26.

257 Zoë Marriage, "Flip-flop rebel, dollar soldier – Demobilisation in the Democratic Republic of Congo", Paper prepared for Research Project on the Political Reintegration of Armed Groups, CSD Research Programme at King's College London/ Norwegian Ministry of Foreign Affairs, May 2006, p. 14.

258 In passing it may noted that the downgrading of both language training and area studies in many Western universities is one factor that would probably need to be addressed if one were truly interested in developing a greater understanding of the kind of societies in which Western forces – military and civilians – have found themselves engaged in peace-building over the past decade and a half.

Part III: New Theories: Concepts and Criticisms

EFFECTS BASED OPERATIONS AND THE FIGHTING POWER OF A DEFENCE FORCE

by Alan Stephens

The great American soldier-statesman George C. Marshall once observed that if the objectives (ends) of any intended activity were correctly defined, then even a lieutenant – in other words practically anyone – could write the strategy needed to pursue those ends. A similar intellectual connection was argued by the greatest strategic thinker, Carl von Clausewitz, in his discussion of the relationship between ends and means in war, and in his most famous aphorism, "war is a mere continuation of policy by other means".[259]

The essence of any strategy, ranging from one conceived on the spur of the moment during a fire-fight between a few infantrymen to one developed for a theatre-level campaign, is the relationship between ends, ways, and means, in which ends is the objective (total victory, conditional victory, stalemate, not losing, etc); ways is the form through which a strategy is pursued (military power, diplomacy, economic sanctions, a combination of same, etc); and means is the resources available (people, weapons, international influence, money, etc). If the ends-ways-means relationship is not logical, practical and clearly established from the outset then the entire action/campaign is likely to be at risk, or at the least flawed.

EFFECTS BASED OPERATIONS AS A STRATEGIC PHILOSOPHY

Marshall and Clausewitz were to all intents and purposes talking about a process which today we call effects based operations. Over the past 15 years EBO has been adopted as the name for a methodology in which the desired effect/outcome of any action, regardless of its scale, should be identified before that

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259 Carl von Clausewitz, *On War*, ed. Anatol Rapoport (Penguin: Harmondsworth, 1982), pp 122–38, 401–10.

action is initiated, and which ideally should be complemented by its associated ways and means.

The background to effects based operations (EBO) is worth examining, not least for the conspicuous example it provides of a common logical flow in strategic studies, namely, one in which existing or emerging capabilities shape concepts, rather than the other way around. In this instance the philosophical catalyst has been the tactical capability represented by precision-guided munitions.[260]

Precision-guided munitions (PGMs) were used in World War II and the American war in Indochina but have reached maturity only in the past decade, comprising about 9 per cent of all munitions dropped by Coalition air forces during Operation Desert Storm in 1991 and 70 per cent during Operation Iraqi Freedom in 2003.[261] The trend revealed by those numbers is clear and the implications far-reaching. What they mean is that for the first time on a large and sustained scale, if a target can be identified it can be hit. In the past, the relative inaccuracy of air strikes (which thus far have been the primary expression of recent attempts to prosecute effects based operations) established an imperative to physically destroy targets. If it took 9,000 bombs to eliminate a notional target in World War II, which it did, there was no point in finesse. Consequently, overkill in terms of the technique employed (area bombing) and the kinds of weapons used (large high explosive bombs) was a rational if intellectually crude response. Today, one PGM can achieve the same effect as World War II's 9,000 dumb bombs, a shift which represents a new capability of the first order.[262]

But "hitting" something precisely has turned out to be only the start point of a process in which a tactical/technical capability is now being translated into a methodology for planning and warfighting for all three traditional services, and which may have the potential to embrace not just military activities, but a "whole-of-nation" approach to security.

The conceptual breakthrough came with the simple but powerful realisation that, given that a target *would* be hit precisely, did it need to be destroyed? Could a more tailored/suitable/subtle, even psychological, *effect* be generated by calibrating the weapon both to the target and to the ultimate campaign/na-

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260 See for example Colonel David A. Deptula, *Firing for Effect: Change in the Nature of Warfare* (Arlington: Aerospace Education Foundation, 1995); and Nick Cook, "Cause and Effect: Effects-Based Air Operations", *Jane's Defence Weekly*, 18 June 2003.

261 The 70 % figure comes from Lieutenant General T. Michael Moseley, *Operation Iraqi Freedom – By the Numbers* (USCENTAF, Assessment and Analysis Division, April 30, 2003), p. 11.

262 Richard P. Hallion, *Storm over Iraq* (Washington D.C.: Smithsonian Institution, 1992), pp. 282–83. In Appendix Table 2, Hallion presents bombing accuracy data from World War II through to 1990 using unguided 2,000-pound bombs against a 20x30 metre target. The improvement in accuracy illustrated in that table is remarkable; it becomes even more so when precision-guided bombs are used as the benchmark.

tional security objectives? In other words, could a better fit be achieved with Clausewitz's enduring strictures on ends and means, and on war as policy?

The targeting of electrical facilities in Baghdad during Operation Desert Storm in 1991 provides the classic case study of EBO at the tactical level. Instead of destroying power grids with high-explosive bombs, the American-led coalition used weapons that dispensed thousands of carbon fibres to short-out transformers for periods varying from hours to days, depending on the prevailing operational demands (and how long the Iraqis took to remove the fibres). The same principle is currently motivating research and development into increasingly flexible weapons to facilitate the pursuit of a wide range and scale of effects: examples include warheads that can be calibrated immediately prior to release to deliver a specific explosive intensity; non-lethal weapons; inert warheads; miniaturised weapons (more effects per platform/mission), and so on. The objective is to realise an effect tailored to the prevailing circumstances, rather than accept the somewhat mindless destruction of every target.

Given that warfare ultimately is a clash of wills, it was almost inevitable that this rediscovered interest in precisely linking actions to desired outcomes would be extended, first, to all levels of operations and decision making from the tactical to the strategic; and second, to the pursuit of cognitive as well as physical effects. It is no coincidence that the rise of EBO has been paralleled by an invigorating debate on "the mind of war", perhaps best represented by the US Marines' use of John Boyd's work on competitive decision making on the battlefield. Indeed, the fact that Boyd's OODA loop (=observe-orient-decide-act) and phrases such as "getting inside the enemy's decision making cycle" have almost become clichés is an indication of how influential this set of ideas has become.[263]

Three separate actions from Iraqi Freedom illustrate different kinds and levels of EBO in practice. The first concerns the Americans' approach to securing control of the air, which traditionally has been won by physically destroying the enemy air force in the air and on the ground. This time, however, consistent with the concept of achieving a precise effect – namely, negating the Iraqi air defence system to facilitate unimpeded use of the air by friendly forces – comparatively little effort was directed towards destroying Iraqi aircraft and their supporting infrastructure. Instead the Iraqi air defence system was nullified by a series of tailored and connected EBO actions, including deterrence (Iraqi memories of their rout in the air in 1991, which in 2003 predisposed their pilots

263 John R. Boyd, A Discourse on Winning and Losing, Briefing, 1987, *Defense and the National Interest* (online 18 Apr 2007). For additional commentary on Boyd, see Robert Coram, *Boyd: The Fighter Pilot who Changed the Art of War* (Boston: Little, Brown and Co., 2002); and Frans Osinga, *Science, Strategy and War: The Strategic Theory of John Boyd* (Delft: Eburon, 2005).

to stay on the ground), selective hard strikes against key command and control nodes (if pilots have no instructions, no radar to guide, and no communications, they are unlikely to be effective), and selective soft strikes (feeding false data into Iraqi information systems, spreading computer viruses, etc). It is noteworthy that the Iraqis launched more than 1600 surface-to-air missiles and made some 1200 anti-aircraft battery attacks against the coalition but shot-down only seven aircraft, numbers that indicate their air defence system had been essentially rendered dysfunctional without having been destroyed.

Time-sensitive targeting intended to kill leading members of Saddam Hussein's Ba'athist apparatus is the second example, in this case one which combined physical (decapitation) and cognitive (coerce the ruling elite) effects, noting that about 100 such operations were mounted during Iraqi Freedom.[264] Finally, the reportedly successful bribing of senior Iraqi officers to surrender rather than fight is representative of perhaps the most cost-effective approach to EBO, one which is wholly cognitive/informational.[265]

If it makes sense to try to achieve a precisely defined effect from every (nominally) tactical action, which it does, then it makes even more sense to adopt the same approach to national security objectives and to planning and conducting military campaigns. In that context, the term "EBO" has come to define a *philosophy* for national security, and therefore differs fundamentally from other recent phenomena such as the so-called *Revolution in Military Affairs* and Network-Centric Warfare, which respectively have been one-dimensional (technology without doctrine) and strategically insufficient (a mere enabling mechanism).

A fundamental step in implementing an EBO-derived approach to security is to have a clear understanding of what we mean, and what we do not mean, when we talk about an "effect" we wish to establish as an objective, and which we wish to generate from a set of actions. Regardless of the kind and the extent of any effect we may wish to achieve, if we are successful, then, in our terms, we will have "won". But like most things in life "winning" is a relative concept; consequently, an open-minded interpretation of the term is likely to be most useful as it will generate options and encourage flexible thinking.

Whenever we believe we need to control, react to, or shape a particular set of circumstances, our objective should be to achieve as much as possible from the available resources at the lowest affordable cost. This is a critical judgment because it implies that an effect perceived by one individual as a "loss"

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264 Andrew Krepinevich, *Operation Iraqi Freedom – A First-Blush Assessment* (Washington D.C.: Center for Strategic and Budgetary Assessments, 2003), pp. 17–18, 32. Another 50 or so strikes were made against other time-sensitive targets such as reported weapons of mass destruction sites and terrorists.

265 Walter J. Boyne, *Operation Iraqi Freedom* (New York: Forge Books, 2003), p. 34.

can be perceived by another as a "win". In other words, depending on the point of view, a "winning" outcome might fall anywhere along a continuum of possibilities ranging from unconditional victory to acceptable defeat. The experience of the American-led alliance in Indochina between 1962 and 1973 illustrates the point. By almost every military measure that alliance defeated its North Vietnamese and Vietcong enemies, inflicting huge human and material losses. But because of the politics of the situation the only effect the North Vietnamese needed to achieve to "win" was to not "lose". Their success in pursuing that outcome eventually precipitated the American decision to withdraw from Vietnam in 1973, which in turn was the precursor to the collapse of the South Vietnamese government in 1975. Similarly, sporting teams matched against manifestly superior opponents are often considered "winners" if they manage a gallant defeat.

Establishing a logical and realistic relationship between the ends-ways-means nexus is also fundamental to formulating an EBO philosophy; and, as noted above, correctly defining the desired end – the ultimate "effect" – is in turn the key to that process. Before embarking on any campaign – that is, before attempting to put any strategy (the ways) into practice – the desired (political) ends should be determined. In other words there should be a clear understanding of what, in the prevailing circumstances, is meant by "winning". This is the crux of Clausewitz's stricture regarding war as a mere continuation of policy. The achievement of an apparently satisfactory result at one level of national security (capturing an enemy leader, seizing ground, the capitulation or even destruction of the enemy, etc) may be of little consequence if that result does not support the ultimate objective; or if, more probably, the desired ends have not been clearly identified. Few better examples of this intellectual disconnect in practice can be found than American President George H. Bush's experience following Operation Desert Storm in 1991.

The international coalition led by the United States against Saddam Hussein achieved a remarkably quick and conclusive military victory, routing the ostensibly powerful Iraqi armed forces in only forty-three days with relatively few friendly casualties. Bush and his administration had, however, thought lit-

tle beyond the military operation.[266] It was one thing to drive the Iraqi invaders out of Kuwait, but the political question remained: what then?

In the event, when the coalition's commanding general, Norman Schwarzkopf, attended a hastily arranged meeting with his Iraqi counterparts to draft an instrument of surrender, he had almost no guidance from Bush regarding the required political ends. What was the envisaged post-war political form of (defeated) Iraq? How would that affect the balance of power in the Middle East? How would the numerous dissident groups in Iraq respond to Saddam's defeat? What did the coalition want to do with Saddam? How would other influential players react to American actions? And so on. Working in a political vacuum, Schwarzkopf was understandably uncertain and, as it happened, in the longer term, not surprisingly, unsuccessful. Within weeks of the war's conclusion Saddam Hussein was again dominating Iraq and was again perceived as a major threat to international security. Indeed, despite his army's humiliation in 1991, by the mid-1990s Saddam could with some justification claim to have "won" a political victory of sorts over the Americans.

Defence officials must understand the role government should play in setting ends. In Iraq, General Schwarzkopf may have won a crushing military victory, but by itself "military victory" did not amount to a sufficient definition of the desired national political effects. A similar kind of confusion attended the war in Indochina, in which the desired (American) political effects were not only unclear but also, to the extent that they were evident, were inconsistent with their ways (a strategy of attrition based on massive firepower) and their means (conventional forces versus guerrillas).

Events in Iraq in 2003 followed a depressingly similar pattern. Once again the United States' leadership, this time under President George W. Bush, failed dismally to define either accurately or intelligently its desired political ends in Iraq, noting that those ends have to be both realistic and acceptable within the overall context. Was the Americans' desired end to find and destroy alleged weapons of mass destruction? Or to finally overthrow Saddam? Or to establish "democracy" in the Middle East (whatever that might mean)? And also once

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266　Michael R. Gordon and General Bernard E. Trainor have noted that when the fighting ended, two ethnically based uprisings that the Bush administration had "neither wanted nor anticipated" suddenly broke out; and that the administration "knew little of the Shiites", the dominant ethnic group in Iraq which had been brutally suppressed by the minority Sunnis who supported Saddam Hussein: see Michael R. Gordon and General Bernard E. Trainor, *The Generals' War. The inside story of the conflict in the Gulf* (Boston: Little, Brown and Co., 1995), pp. 450–56. See also H. Norman Schwarzkopf (with Peter Petre), *It Doesn't Take a Hero* (New York: Bantam Books, 1992), pp. 479–80, in which Schwarzkopf recalls that as he was preparing to meet his Iraqi counterparts "cease-fire terms [were still being] reviewed by the Defense Department, the State Department, and the White House, and their various bureaucracies were having trouble keeping up with the pace of events".

again, the means and ways were defined almost exclusively in terms of military force. Notwithstanding the rapid military victory in 2003, and the capture and then eventual execution of Saddam in December 2006, the ensuing civil war indicated a fundamental disconnect in the US' ends-ways-means construct.

Suffice to say that if the desired ends of any proposed course of action do not have a realistic political dimension which is clearly understood by senior officials, then the executing strategy is likely to be incomplete.

"Ways" defines how a particular strategy is to be implemented; how, in broad terms, the ends (effects) are to be pursued. In World War II the Allies and the Axis both overwhelmingly relied on the application of military force as their way of trying to achieve their objective of unconditional victory, with other potential ways such as diplomatic negotiation and economic pressure playing comparatively minor roles. During the Cold War, by contrast, it was through the threat of force, expressed via the linked doctrines of mutual assured destruction and deterrence, that the Americans and the Soviets both sought to contain each other's global influence and to avoid a nuclear holocaust.

Finally, the "means" are the resources needed to implement the chosen way(s) in pursuit of the desired ends. The overriding principle here is not to let one's ambition exceed one's grasp; that is, if the means to an end do not exist then the end is by definition unrealistic. Matching ends to means is an art in itself. Nevertheless, and notwithstanding the caution regarding overambitious ends, the fact remains that even ostensibly poor nations and organisations are likely to have a large array of means at their disposal. In recent years suicide bombers have emerged as a potent if grotesque strategic weapon; other commonly available measures might include diplomatic pressure, the manipulation of international opinion, exploiting a comparative advantage in a vital resource (oil, timber, geography, intellectual), and so on.

China and the United States provide instructive contrasting approaches to making the most of one's innate military means. It should come as no surprise that from World War II through to the 1990s, economically poor but population rich China planned to rely on its vast pool of manpower (the means) by trying to draw any protagonists into a war characterised by mass, close-up fighting, and attrition (the ways). The United States' means, by contrast, has come to epitomise the Western way of war, in which a powerful economy and a well-educated population have underwritten a reliance on overwhelming technological superiority and highly-skilled military professionals, a combination which in turn has facilitated the ability to fight with knowledge and precision, at a distance.

Troops in uniform and machines of war are only the most visible component of any set of means. Generals have been undone by logistics failures just as often as they have by defeat on the battlefield. Napoleon Bonaparte's famous observation that an army marches on its stomach remains valid, but

today would also have to mention fuel, oil, ammunition, and spare parts for a vast and complex array of weapons systems. Even the brilliant German general, Erwin Rommel, could not overcome the shortage of fuel for his mechanised units that contributed as much to his eventual defeat in the North African desert in 1941–43 as did the direct attacks on his forces by the Allies. And to take a broader example, it is not by chance that most nations have been unable to develop and sustain an effective air force: the essential technological and scientific research elements of the "means" are generally too difficult to achieve and too expensive to sustain.

It is a military axiom that time spent on reconnaissance is never wasted. That maxim could be paraphrased for strategists. The time a decision maker at any level spends ensuring that: his desired ends are realistic, clearly defined, and consistent with the established political objectives; the way(s) chosen to pursue those ends are feasible; and the available means are suitable and sustainable, is never wasted. The importance of establishing and maintaining a realistic relationship between ends, ways and means as the basis of an EBO-derived approach to security cannot be overstated.

THE FORCE STRUCTURE

Unless senior officials first define in reasonably clear terms the kinds of effects the military will be required to generate, then the force structuring process which ultimately has to translate planned strategies into capabilities and actions is likely to be derailed. The problem here is the institutional rigidity inherent within tri-service defence organisations. That rigidity is revealed through such issues as single-service parochialism; the retention of "legacy" weapons systems which have outlived their usefulness, but which the services fight to retain because they define themselves culturally through the ownership of particular systems; and "capability creep", an insidious process in which the tasks which it is claimed a specific weapons system is needed for are gradually expanded, thereby (apparently) strengthening the (alleged) requirement for that system. Those and similar practices are inimical to any rational force-structuring outcome.

By contrast, the application of an EBO methodology compels decision makers to focus on *context*. At the grand strategic level the introduction of an EBO-based regime requires a government to identify broadly defined desired effects which provide sufficient guidance for a defence force to shape itself rigorously. For example, instead of determining the military's development through an on-going series of ad hoc decisions based on the issue of the day (the arrival in the region of a new platform/capability, the latest security contingency, a new procurement decision, the need for an election show-stopper, whichever service is making the most noise in public, etc), a government might direct its defence force to be capable of generating one or a combination of four broad effects:

- a strategic effect
- a theatre-level effect
- a domestic security effect, and
- a peace operations effect.

That guidance might then be expanded to identify the methods through which broad contingency-related effects were to be pursued, such as:
- physical
- cognitive, and
- informational.

Desired effects might be further refined by descriptions which locate them within one or more physical, cognitive or informational methods. For example, we might require our defence forces to be capable of generating "annihilation" as an extreme physical effect; "deterrence" as a combination of physical and cognitive effects; and "manipulation" as a combination of cognitive and informational effects.

Any rational application of such guidance would lead to distinctive force-structuring conclusions for each required effect and its associated method/s.

APPLYING EBO

It should be evident from the list of broad effects, methods and forms that EBO is applicable at any level of conflict, and that it facilitates the application of minimum, as opposed to maximum, or excessive, force. Furthermore, it is a defining characteristic of EBO that, invariably, it will be an implicit aim of the active protagonist to try to turn a tactical or operational gain into a strategic gain.

By its nature, the successful application of EBO will demand a profound understanding of an opponent's culture, society, governance and economy, which in turn will place an even greater premium than already exists on the skilled collection, analysis and dissemination of information (noting that this process must include measurements of the post-facto effects that have actually been generated as opposed to those that were sought). What this means is that if EBO is to be pursued at a campaign or complex operations level, it will require a degree of military professionalism (highly trained people, good ideas, and advanced equipment, all supported by a robust economy and a strong indigenous research and development base) possessed by very few nations or organisations. In other words, EBO could constitute a major asymmetric advantage for those who master it.

Asymmetric advantage is a subject that warrants brief elaboration. The notion of fighting asymmetrically has received a great deal of publicity in recent

years, primarily because of the perceived originality of terrorist groups which have used non-conventional methods/weapons (suicide bombers, civil airliners, car bombs, shoulder-launched anti-aircraft missiles, etc) to strike unexpectedly against their (usually) Western enemies. There is of course nothing new in the concept, the competition to establish an advantageous mismatch on the battle-field being as old as conflict itself. In other words, asymmetric warfare is a two-way street. And for some sixty years now the West has possessed an immensely powerful asymmetric advantage of its own, defined by the exploitation of well-educated, highly trained people and overwhelmingly superior technology, which in combination have facilitated an increasingly dominant ability to fight with precision and knowledge, at a distance. Many armies fight very well close-up; the point of the Western way of war is to deny them that opportunity. The end result has been a series of extraordinarily successful theatre-level campaigns in which ostensibly formidable enemy armies have been routed, with relatively few friendly casualties.[267] It is partly because of the apparent incontestability of the Western way of war that some aggressor states and organisations have tended to turn to asymmetric (terror) tactics of their own.

Notwithstanding the utmost endeavour, efforts to precisely determine desired effects will to a greater or lesser degree remain an inexact science. And as is the case with every form of coercion, the application of EBO will be inter-active. What this means is that any effect we pursue may trigger unforeseen or unintended second- and third-order effects, perhaps within our own system as well as that of the enemy, the consequences of which could feasibly be worse for us than accepting the pre-conflict status quo. This is true of most military actions, but the caveat needs to be made.

It is important to appreciate that any immediate or short-term desired effects will have to be generated by existing or rapidly evolved capabilities; that is, we may have to manage (possibly unexpected) emerging threats with exist-ing (possibly unsuitable) legacy defence capabilities. There are inherent prob-lems in relying on capabilities derived from hardware which not only can take twenty years from conception to operational service (strike aircraft, warships), but which also then typically remain in service for thirty or more years (aircraft, tanks, ships), a timeframe which certainly will see dramatic shifts in threat per-ceptions (the sudden end of the Cold War, the sudden emergence of al-Qaeda, illegal immigrant flows, etc).

This indicates that in the first instance defence forces should focus on a system of generating effects that is:
• fast
• agile, and
• dynamic.

267 Iraq in 1991 and 2003, the former Republic of Yugoslavia in 1995 and 1999, and Afghanistan in 2001–02.

Those characteristics in turn point to the potential of strategies that value cognitive (non-kinetic) effects above physical effects, the rationale being that the former are less likely to rely on legacy hardware and more likely to exploit dynamic practices. Such non-traditional strategies might also increase the chance of quick conflict resolution with minimum casualties and physical destruction. For example, information operations which undermine the confidence of the opposition elite, encourage defection and surrender, infiltrate enemy command and control systems, spread misinformation and computer viruses, and so on, have all been used to increasing advantage in recent years. And unlike physical effects which invariably require the deployment of forces and the risking of friendly lives, cognitive effects can be pursued from a secure (perhaps homeland) base, and for extended periods, with little if any danger to the executors.

A radically different attitude might be needed towards the capabilities currently generated by legacy systems, given that the timeframes associated with those systems (too slow to enter service, too long in-service) are inimical to the philosophy of EBO. Among the initiatives being examined, rapid prototyping and "tranche" acquisition are currently the most fashionable. Selecting a particular platform for rapid prototyping will involve a degree of technological risk, and might also lead to accusations of favouritism from companies whose products are not chosen for what would amount to a form of preferential treatment. However, if a platform's potential were strong, the benefits of reducing the time to bring it online by perhaps as much as ten years would justify those kinds of risks. Introducing platforms in discrete tranches (blocks) rather than through the traditional method of continual delivery could also decrease the time needed to make a portion of the capability productive, in this instance by reducing the effort associated with having to set up new logistics, to prepare and conduct new training courses, and to develop operational concepts.

Other initiatives are already in place. Many defence forces now utilise outsourcing, leasing, and commercial, off-the-shelf acquisition as early, indirect and partial solutions to the problem of legacy systems. Robotics and unmanned aerial vehicles, which among other things reduce the need for costly, long-lead time machines and operators (pilots, principal warfare officers, etc), are representative of another set of more direct, emerging options.

These kinds of changes have the potential to influence for the better an issue that remains the most intractable within Western defence forces, namely, the single services' cultures and attitudes. But they are unlikely to be sufficient.

CULTURE AND ATTITUDE CHANGE

Over the past two decades a great deal has been written and said within advanced defence forces about the implications and importance of such phenomena as the revolution in military affairs and network centric warfare, and the

concomitant progress being made towards genuine joint operations and objectives. But despite such pronouncements it often seems that, intellectually and emotionally, the Western military remains three separate services.

A revealing illustration of this emotional barrier to fostering an holistic defence philosophy can be seen in the missions the services define for themselves. Armies, for example, almost invariably list their mission simply as being to "win the land battle". While winning land battles historically has indeed been the main activity of armies, in itself it need not represent a desired effect, and nor does it define the only significant effect we might reasonably expect an advanced land force to deliver. Thus, armies have asserted sea denial (Turkish gun batteries dominating the Dardanelles in March 1915); they have won control of the air (allied troops capturing Luftwaffe airfields in France following the D-Day landings in 1944; Ariel Sharon's armoured columns smashing through the Egyptians' ground-based air defence system along the Suez Canal in 1973); and so on.[268] There are so many similar cases that the point should be self-evident, but it is so important that it does need to be emphatically made. The missions typically listed by navies and air forces tend to be less self-limiting but are nevertheless generally still couched in strictly environmental (sea and air) terms, and are therefore nebulous within an EBO construct.

A similar kind of intellectual straitjacket is apparent in the "capabilities" services define for themselves, with the distinguishing feature of most combat groups being their single-service hardware (tanks, trucks, frigates, fast jets, etc). As is the case with the missions, this outlook entirely ignores the often battle-winning roles played by capabilities which notionally "belong" within an ostensibly different environmental or warfighting model.

The attitude this represents and the terminology it uses constitute formidable barriers to progress. Because missions and capabilities are derived predominantly from the platforms-capabilities-effects method of analysing what a defence force is and what it might do, both the explicit and implicit effects which flow from those definitions are overwhelmingly kinetic. In other words, the singular opportunity to acquire a potent asymmetric advantage that this chapter has argued will be open to those defence forces which are able to master the cognitive and informational aspects of EBO receives no recognition.

There are good reasons why the evolution of defence forces has traditionally taken place within the distinct environments of land, sea and air. Even

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268 Allied armies in France helped achieve control of the air by capturing German airfields, which forced the Luftwaffe further and further back into Germany. In the first week of the 1973 Yom Kippur War the Israeli air force was unable to defeat Egypt's ground-based air defence system along the Suez Canal. It was only after Sharon's armoured column punched a hole through that system that the IAF was able to penetrate it without suffering unacceptable losses.

now when the influence of information operations and the capacity to act with speed and precision are becoming more evenly balanced across armies, navies and air forces, there are still well founded specialist and cultural arguments in favour of the long-standing organisational arrangement. Forty years down the track, Canada's ill-considered decision to peremptorily combine its three services is still used by guardians of the old order to "prove" the danger of ignoring history.[269]

It is unquestionably the case that the social compact within a professional, all-volunteer defence force is unique, and that an individual's readiness to risk his or her life can be related to their identification with their service and unit, as well as to their commitment to their comrades. Nevertheless, as J.F.C. Fuller has noted, the fighting power of a defence force lies in the first instance in its organisation.[270] It could be a mistake of the first order if tradition alone were allowed to stand in the way of any reform which promised significantly enhanced performance.

If EBO is to be genuinely embraced it may be intellectually unsustainable to retain operational structures based largely on service-related equipment (means), as is presently the case. Taking that observation a step further, we might conclude that if we started today with the proverbial clean sheet of paper to shape a defence force for the 21st century, we would not end up with an army, a navy and an air force as we now know them. The question then would become one of how to implement change.

The challenge might be addressed in the first instance by focusing on attitudes rather than by attempting to impose substantial organisational reforms which almost certainly would face counterproductive resistance from the single services. The immediate objective should be to establish a common thread of intent throughout an organisation, an outcome which might be achieved simply by redefining missions and roles in effects based terms, and by linking existing "capabilities" (platform-derived combat groups), regardless of their service, to one or more of those effects. The way in which we use words can be a powerful force for change, without necessarily threatening vested interests or social compacts.

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269 Canada's armed forces were more or less combined in 1964. The way in which the reorganisation was implemented largely ignored the sensibilities of the single services, and the outcome proved highly unsatisfactory. The single services have since regained much of their distinctive character and organisation.

270 Fuller was the first Western strategist to argue in favour of integrated forces, writing in the 1920s that "armies and air forces [should be] organized to break the enemy's resistance with a minimum of fighting". See Douglas A. Macgregor, "Transformation and the Illusion of Change", *National Security Studies Quarterly*, Autumn (2000): 3–4; and J.F.C. Fuller, *Foundations of the Science of War* (Hutchinson and Co., 1925), and *The Conduct of War 1789–1961* (London: Methuen and Co., 1977), esp. pp 242–45.

Whether or not semantics alone would be sufficient to create the kind of organisational shift ultimately implied by EBO is problematic. If at some stage it emerged that the key combat elements of a nominal defence force associated with any identified need to generate, say, a strategic effect, were special forces and strike aircraft, it might become highly desirable to formally bring those elements together organisationally. The almost certain need to add cognitive warfare specialists (linguists, social and economic analysts, etc) to this particular mix would only increase the prospect that at some stage a major reorganisation would become necessary.

Edward Luttwak may have identified both the problem and the answer.[271] In Luttwak's judgement, opposition to the new is much stronger when it is not just traditional weapons but institutions that are endangered. For example, in 1940, the British and French armies grossly misused their tanks because they insisted on absorbing them into the infantry and cavalry, instead of following the German lead and creating new tank-centred formations. Equipment (and Luttwak might have added "equipment-defined organisations") does not innovate, men do; which is why the successive military revolutions that have changed the course of military history over the centuries have always resulted from major institutional reforms imposed by determined leaders, rather than from the spontaneous effect of new weapons or new circumstances.

The concept of EBO has not been immune from corrosive single-service parochialism. In the United States, for example, one of the principal proponents of the concept, air force general David Deptula, has been subjected to a number of unusually virulent attacks by retired marine corps general Paul van Riper, the latter apparently being convinced that EBO represents a self-serving attempt by the air force to undermine long-standing (doctrinaire) military procedures.[272] Similarly, an admittedly more informed and better balanced critique of EBO written by two Australian army officers still seemed determined to undermine EBO before it can be fully developed.[273]

Given those experiences and Luttwak's caution, it may be the case that the degree of organisational reform demanded by an EBO philosophy ultimately will have to be externally imposed.

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271 Edward N. Luttwak, "Lifting the Fog of War by Bill Owens with Ed Offley", book review, *New York Times Book Review*, 21 January 2001.

272 See "Van Riper's E-Mail to Pace, Hagee, and Schoomaker Regarding JCIDS", *Inside the Navy*, 23 January 2006, "Van Riper, Deptula Disagree Over Effects-Based Ops, Enemy 'Control'", *Inside the Navy*, 6 February 2006, and Paul K. Van Riper, *Planning for and Applying Military Force: An Examination of Terms* (Washington D.C.: Hicks and Associates, 2005). For responses, see David A. Deptula, "Deptula's Reply to Van Riper's Concerns", *Inside the Navy*, 23 January 2006, and Robert S. Dudney, "It's the Effect, Stupid", *Air Force Magazine*, vol. 89, no. 11, November (2006).

273 See Justin Kelly and David Kilcullen, "Chaos versus Predictability: A Critique of Effects-Based Operations", *Security Challenges*, vol. 2, no. 1, April (2006): 63–73.

"BUILD IT AND THEY WILL COME"

The challenge of translating the theory of effects based planning into a practical model should not be underestimated. It is very demanding.[274]

Two points made previously are relevant here. The first is that, because of the nature of EBO, any broad application of the technique will demand a profound understanding of an opponent's culture, society, governance and economy; and the second is that any immediate effect we generate may trigger unforeseen or unintended second- and third-order effects, perhaps within our own system as well as that of the enemy, the consequences of which could feasibly be worse for us than accepting the pre-conflict status quo. Some examples may help to illustrate the complexities implied by these points.

Thus far, EBO has been exercised almost exclusively in the form of offensive air operations, in which selected targets have been prosecuted with kinetic (explosive/hard kill) weapons. While the selection of the right targets and the choice of suitable weapons is a highly specialised task, strike operations nevertheless remain one of the more predictable models within the full range of EBO options, which can extend to the considerably more opaque dimensions of social and cognitive effects. Additionally, the direct results of a kinetic attack are among the easiest to measure, physical damage being more immediately obvious than, say, social disintegration. Yet even with this relatively straightforward example there are potential pitfalls. For example, a strike against an enemy's electrical power generation system might shut-down his war industries, but it might also cut off power to humanitarian services (hospitals, aged-care complexes, water supplies, etc) which could generate damaging international publicity. Competent campaign planners will try to anticipate those kinds of secondary effects, but experience suggests that war is unlikely ever to be entirely free from Clausewitz's fog and friction.

The planning matrix becomes even more complex when we try to directly target the human dimension of warfare – when we try to predict how our opponent's decision makers will respond to actions we initiate in pursuit of a desired effect. The confrontation between Australia and Indonesia in 1999 over the planned military intervention into East Timor, authorised by the United Nations and led by the Australian defence force, illustrates this complexity.

Indonesia is Australia's largest and most important neighbour, and because of its vast population, contrasting culture and sometimes erratic political system, has often been perceived by Australians as a security concern. Consequently, successive Australian governments have poured resources into intelligence programs intended to provide a sophisticated understanding of how

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274 See for example Edward A. Smith Jr, "Effects-Based Operations", *Security Challenges*, vol. 2, no. 1, April (2006): 43–62.

Indonesians think and behave, with the objective of making informed judgements of Indonesia's probable reactions to various contingencies. Yet according to off-the-record reports, when UN forces landed in East Timor, senior Australian officials had little idea of the effect the intervention would generate. Would humiliated Indonesian army officers honour their government's undertaking to cooperate with the UN, or would they yield to emotion and attack? In the event, they followed the former course, but if they had taken the latter the effect could scarcely have been more serious for Australia.

If one protagonist (Australia) which tries so hard to understand another (Indonesia) cannot confidently predict first-order intellectual/emotional effects, let alone (possibly catastrophic) second- and third-order effects, how useful is similar planning likely to be when competitors who know comparatively little about each other are involved? The obvious example here is the American-led invasion of Iraq in 2003, in which the Bush administration's ignorance of the cultural and historical dynamics in Iraq generated massive unforeseen (by the US) follow-on effects. Clearly, the last thing American officials expected after their apparently decisive military victory over Saddam Hussein's army was Iraq's subsequent disintegration into insurgency and civil war, and the probability that the eventual outcome (effect) they have caused will be a conservative, theocratic system, hostile to American interests. Furthermore, the American invasion may well have increased the determination of Iran's extremist leadership to develop nuclear weapons, an undesirable and unintended effect if ever there was one.

To summarise, at the moment, complex effects based modelling is extremely challenging. But that is not to suggest that EBO is unworkable. On the contrary, the notion of planning actions around clearly defined, desired effects, both physical and cognitive, as opposed to the practice of simply destroying targets, is self-evidently good. It *is* to suggest, however, that we need to be aware of EBO's complexities, and to proceed accordingly. At this early stage, two approaches to exploiting the technique appear credible, one philosophical, the other practical.

The philosophical approach is simply to regard EBO as a state of mind, in which planned actions are invariably assessed within the ends-ways-means construct. In other words, all planning should start with a determination of the effects we require, and of those our actions are likely to generate, including subsidiary and unwanted consequences. Under this approach we can reasonably expect that we should start operations with a clearer idea of where we want to go, how we should get there, and what we should use, than would otherwise have been the case. Evidence from professional journals and curricula within staff colleges suggests that, for advanced military forces at least, the merit of thinking in terms of effects rather than of destruction, or of seizing and holding ground,

or of attrition, and so on, is already accepted as a given.[275] The approach was astutely summarised by the distinguished Austrian physicist and mathematician Ludwig Boltzmann (1844–1906): "Quite apart from its intellectual mission, theory is the most practical thing conceivable".

We might extend Boltzmann's observation by acknowledging that EBO will not replace either planning or strategy, but that it does offer a means of illuminating and of overcoming recidivist, single-service dogma.[276]

The practical approach is to continue to develop EBO through the relatively straightforward, and thus far fairly successful, application of the concept to strike operations, and to constantly evolve that technique through the exploitation of technology. That is, we should take things a step at a time, and continue to use applications whose immediate effects (in this instance, primarily kinetic) we can reasonably anticipate during the planning phase, and whose results (physical damage) we can reasonably expect to measure quickly after the event.

There is something of the "build it and they will come" principle about this method, which seeks to leverage the ambiguous dynamic which has always characterised the relationship between theory and technology.[277] Does theory lead technology, or vice versa? Regardless of the answer we might favour, the relationship is symbiotic. In this instance, because of the inherent complexity of the "theory" component of the dynamic, the thinking is that we should consciously let the "technology" component take the lead. For example, an experienced USAF effects based campaign planner has suggested that the data link is one existing technology that could be readily adapted to enhance effects based operations. Presently, conducting strikes and then measuring their effects usually involves two separate tasks, which are often separated by significant time delays. If data links were built into weapons, operational staff would be able immediately to measure (assess) the results of every weapon release, thereby enhancing their ability to control both desired and actual effects.[278]

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275 Even a cursory glance through the professional journals of almost any advanced defence force will reveal scores of articles discussing various aspects of effects based operations; similarly, the curricula of staff colleges routinely address the subject.
276 My thanks to Group Captain Tony Forestier for this observation.
277 The saying "build it and they will come" is from the 1989 motion picture "Field of Dreams", itself an allegory for belief. An American farmer hears voices which he eventually realises are telling him to build a baseball diamond in his cornfields. He does so, and the ghosts of the 1919 Chicago White Sox baseball team (notorious for "throwing" the World Series) appear on his "field of dreams".
278 See Colonel Gary L. Crowder, "Targeting for Effects", *Jointness*, Proceedings of the 11th International Air Strategy Symposium (Daejeon: Republic of Korea Air Force, 2005), pp. 195–219.

In short, the "build it [the technology] and they will come [the theory]" approach to EBO minimises the complicating cognitive factors while exploiting the more manageable technical factors.

Just as EBO as a mindset has become a given within many advanced defence forces, so too has the OODA cycle or "loop". The confluence is timely, because the application of the OODA process is fundamental to EBO.

Devised by the American strategist John Boyd, the observation-orientation-decision-action cycle represents a "universal logic of conflict". Simply put, Boyd argued that the protagonist who is the quicker to act intellectually and physically is likely to win. The OODA loop defines this competitive process.

As the loop indicates, we need first to observe our opponent – to assess what he is doing, and how. We must then orient ourselves to the prevailing circumstances: that is, we must assess what we know about our opponent and ourselves, including such things as experience, culture, support, geography, technologies, economics, alliances, firepower, desired/acceptable objectives (end-state), and so on. Having observed and oriented, we decide what to do; and, having made a decision, we act. Immediately after we have acted, the OODA process recommences, as we observe our opponent to assess his response to our decision and action. We then reorient ourselves, and so on, until the particular decision/action contest is resolved, ideally in our favour.

Boyd regarded orientation as the most important phase of the process. Whereas poor orientation (understanding) is likely to lead to bad decisions, informed orientation is likely to produce good decisions and, therefore, superior actions. From that, it follows that our first responsibility must be to understand the strategic environment (the US-Iraq experience is instructive here, in a negative sense).

If "orientation" is the intellectual core of Boyd's theory, then "time" is the key to its application. Demonstrating elegantly simple logic, Boyd noted that time simply exists, that everyone has equal access to it, and that it does not have to be transported, sustained or protected. In other words, time is a "free good" which a skilful decision-maker should exploit and a less-skilful decision-maker is likely to squander. In particular, time will be the ally of the protagonist who is best able to compress the OODA cycle, who can repeat the loop faster and more accurately, and who can eventually "get inside" his opponent's decision making cycle and thus control the clash of wills. Only then, Boyd argued, is originality of thought and action likely to flourish, a necessary condition if we are to exploit non-linear thinking and asymmetries in our effort to "find and revel in mismatches".

There is a powerful linkage between EBO and the OODA process in general, and the orientation phase in particular. Given the difficulty of predict-

ing and measuring effects, the constant application of the OODA cycle imposes logic and discipline on both the interpretation and the application of our planning. The end result is a process which seeks to exploit the conceptual strength of EBO while at the same time acknowledging its practical limitations.

THE FIGHTING POWER OF A DEFENCE FORCE

The growing acknowledgment of EBO represents a significant shift of style in strategic thinking. Even as recently as the American war in Indochina (1962–73) and the Iran-Iraq war (1980–88), ostensibly intellectually and technologically well-prepared services joined battle with the primary objective of applying force-on-force, relying on mass and firepower, and winning through attrition. Such an approach is not only prohibitively expensive but also inherently self-limiting. EBO, by contrast, establishes a logical flow between ends, ways and means at all levels of strategic thinking and conflict; breaks the illogical but universally practisedd "platforms-capabilities-effects" force development construct; facilitates the exploitation of dynamic ideas and technologies; and provides a security planning philosophy designed to meet the challenges of rapidly emerging threats and seize the opportunities of the information age.

The philosophy of effects based operations represents a rare opportunity for those few nations capable of grasping it. Senior officials should be profoundly disturbed that the greatest impediment to the constructive development of EBO within advanced defence forces is neither intellectual nor technological, but cultural and organisational.

THE FUTURE OF MILITARY THEORY: THE NEED FOR A METHOD OF VERIFICATION

by Antulio J. Echevarria II

Military theory currently has no future. In fact, it has no present. Fortunately, it has a past, and that can help us save it. When we survey military or defence literature today, we find an excess of poorly formed and ungrounded theories, from effects based operations to shock and awe, but nothing that stands up to scrutiny. Without a present, there can be no future. This crisis should cause concern among military practitioners, for theories – even ungrounded ones – inform planning and execution, whether or not we are cognizant of the ways in which they do so. An admixture of poorly conceived theories helped shape the opening rounds of Operation Iraqi Freedom in 2003 and, as events have shown, results fell short of expectations. Happily, we can find a method in military theory's past capable of restoring its future, and in the process its present. For it is by rescuing the future, by laying the groundwork for the next generation of ideas, that we also, eventually, save the present.

English dictionaries typically define theory as speculation, or conjecture, or as an abstract concept or thought.[279] However, because military theory implicitly and explicitly informs practitioners who must carry out tasks of perhaps vital importance to a larger society, it must be more than mere conjecture. It must be a body of verifiable knowledge – not unlike Copernicus' heliocentric (sun-centered) theory of the heavens which eventually came to supplant Ptolemy's geocentric (earth-centered) concept. In short, to suit the needs of the military professional, theory must be an organized corpus of interrelated, mutually supporting concepts and principles. Otherwise, all we will have is a series of random thoughts, the accuracy of which is as reliable as a coin toss. In a word, military theory, unlike its self-indulgent counterparts in art and literature, needs a complementary method of validation, and the willingness, indeed the desire, to use that method. Put differently, military theorists need to embrace the scientist's habit of submitting any intriguing idea to rigorous critical analysis, and they must prove, first to themselves, then to us, that the ideas they wish us to accept are sound.

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279 The definition we are using here, that theory is "a systematic statement of general laws or principles", is usually found as the third or fourth option; see "theory" in *Compact Oxford English Dictionary*, 2nd ed. (Oxford: Clarendon, 1993).

Unfortunately, contemporary military theory has no such method; nor do theorists yet understand how badly they need one. Their chief desire is to push ideas forward, to have them accepted and implemented, whether or not they have been adequately tested. Hence, at present, military theory, as such, does not exist. We can find plenty of intriguing notions, such as *fourth generation warfare*, which are publicly referred to as theories. But, they all fail to rise above the level of speculation. They are not theories in any genuine sense, and they may prove harmful if they find their way into doctrine or become part of an organization's tacit knowledge.

A verifiable body of knowledge of armed conflict was precisely what Clausewitz hoped to achieve with his opus, *On War*, nearly two centuries ago. While the method of verification he chose has received little attention from scholars, it offers a useful start point for constructing a system of verification for contemporary military theory.

CLAUSEWITZ'S METHOD

Clausewitz's famous masterwork is an attempt to capture what he referred to as objective knowledge, or verifiable observations valid for all wars.[280] He hoped to present this knowledge as a coherent theory, an integrated body of knowledge. For that, he needed to discover the laws, the fundamental cause-and-effect relationships, which defined war. These laws would not be of the type that prescribed what kind of action a commander should take. Yet, they were important because they were what ultimately held the universe of war together, not unlike the way in which the laws of physics hold the celestial universe together. Clausewitz found the major theories of his day to be subjective, meaning that they were only true – to the extent they were true at all – for the individual author, or for the particular period in which they were written. Certainly, *On War* accorded with Clausewitz's own experience. However, he also believed the book had to go beyond that; he desired that it should displace the subjective systems of his day, especially those advanced by Enlightenment theorists, such as Heinrich von Bülow, and provide an objective foundation for other theories.[281]

Clausewitz borrowed his method of validation from the eighteenth-century German philosopher Immanuel Kant's system of logic; however, he did it indirectly, through the lectures and textbooks of Johann Kiesewetter, a profes-

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280 Clausewitz's purpose and method are discussed in more detail in Antulio J. Echevarria II, *Clausewitz and Contemporary War* (Oxford: Oxford University, 2007).

281 Carl von Clausewitz, *Vom Kriege. Hinterlassenes Werk des Generals Carl von Clausewitz* [On War], 19th ed., ed. Werner Hahlweg (Bonn: Ferd. Dümmlers, 1991), book II, ch. 2, pp. 281–84. Other such theorists include: Henry Lloyd and Antoine-Henri Jomini, whose theories are discussed briefly in the next chapter. See van Creveld, *The Art of War,* and Azar Gat, *The Origins of Military Thought from the Enlightenment to Clausewitz* (Oxford: Clarendon, 1989).

sor of mathematics and logic, to whom some in Berlin society referred fondly as the "national professor."[282] This method required any analysis to proceed along two parallel lines of inquiry, one logical and one material, which were more comparative than dialectical in nature; the third and final step was to situate any valid concept within an established hierarchy of other known concepts.[283]

The first line of inquiry consisted of examining the concept only according to the laws of logic to determine whether it contained any contradictions or inconsistencies which might render it logically invalid. A concept was logically true if it met any of following three conditions: (1) it was conceivable; a "round square" is inconceivable and would, therefore, be logically false; (2) it had sufficient basis, that is it was derived from another verifiable concept; the concept of a rectangle can be derived from a square, and so it has a sufficient conceptual basis; (3) it emerged as a unified whole from two valid, but conflicting characteristics; the concept of a "four-cornered circle" combines the characteristics of a square and a circle, but does not emerge as valid unified whole, and is therefore false.[284] The color gray, however, emerges from black and white, and therefore is as true as the colors black and white are.

The material line of inquiry necessitated investigating whether the concept actually could exist, or already existed, in the physical world and, if so, in what form. For this line of inquiry, Clausewitz relied heavily on military history, since he realized his own experience in war was too limited to provide a sufficient basis for making universal observations. A concept has material truth if it corresponds with an object in the physical world; a "machine enabling one to fly," for example, could be conceived even in Clausewitz's day, and therefore would possess logical truth, but (aside from balloons) one did not exist in

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282 Johann G. K. Kiesewetter (1766–1819); his principal text was *Grundriss einer Allgemeinen Logik nach Kantischen Grundsätzen zum Gebrauch für Vorlesungen* [An Outline of General Logic on Kantian Principles for Use in Lectures], 2 vols., 3rd and 4th eds. (Leipzig: H. A. Kochly, 1824–25); vol. I deals with pure logic (or reason), while vol. II pertains to applied logic. Peter Paret, *Clausewitz and the State: The Man, His Theories, and His Times* (Princeton: Princeton University, 1985), p. 69; Hans Rothfels, *Carl von Clausewitz: Politik und Krieg* [Carl von Clausewitz: Politics and War] (Berlin: Dümmler, 1920), pp. 23–24; and Werner Hahlweg, "Philosophie und Theorie bei Clausewitz" [Philosophy and Theory in Clausewitz], in *Freiheit ohne Krieg? Beiträge zur Strategie-Diskussion der Gegenwart im Spiegel der Theorien von Carl von Clausewitz* [Freedom without War? Contributions to Contemporary Strategy Discussion in the Light of Carl von Clausewitz' Theories], ed. U. De Maizière (Bonn: Dümmler, 1980), pp. 325–32, discuss Kiesewetter's value to Clausewitz. For the "national professor" reference, see Roger Parkinson, *Clausewitz: A Biography* (New York: Stein and Day, 1971), p. 35.

283 Kiesewetter, *Grundriss* I, pp. 46–47, 109–11; Michael Handel, *Masters of War: Classical Strategic Thought*, 3rd ed. (London: Frank Cass, 2001), appendix C, pp. 327–44; and Aron, *Clausewitz*, esp. pp. 89–175, overemphasize the use of the dialectical method in Clausewitz's approach.

284 Kiesewetter, *Grundriss* I, pp. 45–47, 111–13.

the physical world at that time, so the concept lacked material truth.[285] In this example, our investigation would have had to conclude that a flying machine could indeed exist, logically, but that we could not yet determine whether it could exist materially.

The final step in this method required arranging the concept within, or among, other known concepts in the same or a parent field. The concept of a human, for instance, is verifiable on logical and material grounds. By placing it within the larger concept of animal, rather than plant, we complete our examination of it by locating it in a recognized system of knowledge, which in turn confirms the concept's validity. At the same time, this step provides a finishing touch that reveals something more about the system to which the concept belongs.

Clausewitz applied this methodology to his initial concept of war, which he defined as "an act of violence to force our opponent to fulfill our will." While examining it from a strictly logical perspective, without physical conditions or constraints, he discovered that it contained no inherent contradictions.[286] However, there was also nothing about the concept to prevent the forces it described from escalating *ad infinitum*. Each side of the conflict would surely attempt to outdo the other in terms of the intensity of the violence and the amount of effort it would employ, as well as the aim it would pursue. In terms of pure logic, this tendency to escalate would have to continue forever: there could be no conceivable end. Logic simply does not allow it. The moment one side relents it gives the advantage to the other, and is lost. In the physical world, finite material resources would, of course, prevent such limitless escalation. However, the physical world cannot come into play when one is considering a concept from a purely logical standpoint. Absolute war (*absolute Kriege*), as it appears *On War*'s opening chapter, was merely Clausewitz's term for this idea of limitless escalation, which, again, was all but inconceivable. It is not the equivalent of the concept of total war, with which it is often confused, because it represents an impossible outcome, whereas total war could actually occur, and in many cases essentially has.[287]

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285 Kiesewetter, *Grundriss* I, p. 115.
286 Clausewitz, *Vom Kriege* (1991), book I, ch.. 1, sec. 3–5, pp. 192–95.
287 Kaldor, *New and Old Wars*, p. 25, is an example of this confusion. For the development and realisation of the concept of total war, see Manfred F. Boemeke, Roger Chickering, and Stig Förster, eds, *Anticipating Total War: The German and American Experiences, 1871–1914* (New York: Cambridge University, 1999); Roger Chickering and Stig Förster, eds, *Great War, Total War: Combat and Mobilization on the Western Front, 1914–1918* (New York: Cambridge University, 2000); Roger Chickering and Stig Förster, eds, *The Shadows of Total War: Europe, East Asia, and the United States, 1919–1939* (New York: Cambridge University, 2003); Roger Chickering, Stig Förster, and Bernd Greiner, eds, *A World at Total War: Global Conflict and the Politics of Destruction, 1937–1945* (Cambridge: Cambridge University, 2005).

Clausewitz then examined his concept from a material standpoint. As he did so, he revealed that what kept his escalation from occurring was something that came from outside war itself, policy, which he defined as the trustee or custodian of the collective interests of the state.[288] Policy, or the will of one's political leadership, exists *a priori* to war, and thus was not part of war itself, but external to it. Policy decided the purpose for which the war would be fought, estimated how much effort should be expended, and how much violence should be used. It made these decisions based on the value of the purpose it wanted to pursue, and its estimate of how much its opponent would resist. Accordingly, in the material world, the escalation of war might or might not occur; it was thus a matter of *probability* and not, as pure logic demanded, one of necessity.[289]

As the final step in the examination, Clausewitz demonstrated that war was not a separate phenomenon, a thing-in-itself, as presupposed in his original definition. Instead, it was a subordinate activity of policy, and was thus included within it as a secondary concept in much the same way as the concept of human belongs within the larger one of animal. Indeed, his perhaps most famous expression – that "war is nothing but the continuation of political intercourse (*Politik*) by other means" – reflects his ordering of the concept of war within the hierarchy of other known concepts, in this case politics or international relations.[290] The conclusion one should draw from this, then, is not so much that politics should direct war, but rather that war does not exist outside politics.

We need not duplicate Clausewitz's method exactly to have an effective approach of our own. However, we would do well to start by examining any prospective military theory or concept first from a logical standpoint. Once that is satisfied, we would proceed with an examination of the physical evidence available to support that concept. Finally, assuming the theory passes the first two steps, we would ask whether it adds anything new to what we already know about war.

Of course, military theorists could perform this test on their own, before they unveil their theories. The proponents of fourth generation warfare (4GW) could have benefited from just such an examination. But, since they evidently did not perform one, let us submit 4GW to our three-way test.

288 Clausewitz, *Vom Kriege* (1991), book VIII, ch. 6B, p. 993.
289 Interestingly, the concept of probability and the doctrine of chance were both rather nascent at the time, having appeared mainly in texts written in Latin until the late eighteenth century. Probability and chance were regarded by the educated elite as explanations for laws yet to be discovered; they were considered a scientific way of accounting for uncertainty with respect to outcomes as well as beliefs. Ian Hacking, *The Taming of Chance* (Cambridge: Cambridge University, 2002), pp. 11–13.
290 Clausewitz, *Vom Kriege* (1991), book I, ch. 1, p. 210.

TESTING THE THEORY OF FOURTH GENERATION WAR

Although the theory of 4GW emerged in the late 1980s, it has recently gained considerable popularity, and is frequently offered as an explanation of how terrorists are waging war today.[291] 4GW was originally a vague sortie of "out of the box" thinking that entertained every kind of conjecture about future warfare. While such an exercise can be liberating, the theory that resulted was nothing more than an amalgam of what-ifs produced by a maneuver theorist's misunderstanding of the nature of terrorism and a futurist's infatuation with "high technology."[292] The theory's authors then made the mistake of trying to elevate their rhapsodies into a solid theory; consequently, 4GW was reinvented several times to accommodate the latest developments in technology or tactics, and whatever other ideas were fashionable at the time.

The theory's proponents now claim that 4GW is an "evolved" form of insurgency, much like that which has emerged in Iraq:

> The first generation of modern war was dominated by *massed manpower* and culminated in the Napoleonic Wars. The second generation, which was quickly adopted by the world's major powers, was dominated by *firepower* and ended in World War I. In relatively short order, during World War II the Germans introduced third-generation warfare, characterized by *maneuver*. That type of combat is still largely the focus of US forces … [4GW is an] evolved form of *insurgency* [that] uses all available networks – political, economic, social, military – to convince the enemy's decision makers that their strategic goals are either unachievable or too costly for the perceived benefit [emphasis added].[293]

The Theory's Logic. From a logical standpoint, 4GW's articulation and sequencing of four so-called generations of war is incoherent and indefensible. To portray changes in warfare in terms of generations implies that each one evolved directly from its predecessor and, as is required by the natural progression of generations, eventually displaced it. However, such simple displacement rarely takes place. Instead, significant developments in warfare (as well as in other activities) typically occur in parallel. Firepower, for example, played as much a role in World War II, and in the Korean and Vietnam conflicts as did maneuver, perhaps more. In fact, insurgency as a way of waging war actually dates back to classical antiquity, and thus predates the so-called second and third generations

291 The following critique is developed in more detail in Antulio J. Echevarria II, *Fourth-Generation War and Other Myths* (Carlisle: Strategic Studies Institute, 2005).

292 William S. Lind, Keith Nightengale, John F. Schmitt, Joseph W. Sutton, Gary I. Wilson, "The Changing Face of War: Into the Fourth Generation," *Marine Corps Gazettek*, October (1989): 22–26.

293 Thomas X. Hammes, "4th-generation Warfare: Our enemies play to their strengths", *Armed Forces Journal*, November (2004): 40–44.

(firepower and maneuver) as described by 4GW theorists. Insurgents, guerillas and resistance fighters figured large in many of the wars fought during the age of classical warfare.

Moreover, even if it were valid to portray major changes in the conduct of war as an evolutionary progression from 1GW to 3GW, the next logical step in that progression would not be the sort of "super-insurgency" that 4GW theorists have tried to depict so opportunistically. Instead, the generation of warfare that succeeds 3GW would actually have to be closer to the technocratic vision of network-centric warfare once propounded by some within the defense community, that is – of small, high-tech forces networked together in a knowledge-based system of systems that enables them to act rapidly and decisively.[294] To their credit, the advocates of 4GW rightly criticize network-centric warfare, and its vacuous theoretical offshoots, such as shock and awe, for being too dependent on high technology, and for being too inflexible to accommodate a thinking opponent. Yet, and quite ironically, this is the very direction in which the logic of their particular theory of military evolution would lead them, if they were true to it. Ergo, the technocratic style of warfare that 4GW theorists rail against, and justifiably so, is actually the logical extension of 3GW – and it is, curiously enough, not too far removed from the direction in which 4GW theorists were initially headed.

Also, the theory of 4GW makes a false comparison: it compares massed manpower, firepower, and maneuver, which are military means, to an insurgency, which is arguably a form of warfare wherein the means are ambushes, assassinations, bombings, and other acts of terror. This apples-and-oranges comparison is essentially a logical sleight-of-hand, even if it is unintentional. Collectively, these flaws are more than enough for us to conclude that the theory fails the first test: its logic is inconsistent.

The Theory's Evidentiary Support. The evidence for 4GW is weak; it is based on a superficial and skewed understanding of the past. Today, we can find a great deal of literature analyzing terrorism and terrorist groups. And yet none of this knowledge seems to have found its way into the theory of 4GW. The terrorists described by the theory resemble the German stormtroopers of 1918, or Robert Heinlein's starship troopers of the distant future, more than they do the terrorists of the 21st century. 4GW's terrorists are supposed to be highly intelligent and capable of fighting individually or in small groups; they are supposed to infiltrate another society, then attempt to collapse it from within by means of

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294 David S. Alberts, John J. Gartska, Frederick P. Stein, *Network-Centric Warfare: Developing and Leveraging Information Superiority* (Washington, D.C.: National Defense University, 1999).

some sort of vague psycho-cultural "judo throw."[295] Yet we know that today's terrorists are no more or less intelligent than those of yesterday. Many are of the home-grown variety, having matured in a society that may or may not have fully accepted them, rather than having been sent to the West as part of a grand infiltration mission.

True, there are freelance jihadis who virtually make a living of travelling abroad and committing acts of murder, or who serve as cadres to train terrorist recruits. However, these are far from super terrorists. Better identification measures, and better enforcement of some measures already in place, can limit the movement of these jihadis.

Terrorist groups such as Hamas, Hezbollah, and (to a lesser extent) al-Qaeda have integrated themselves into the social and political fabric of Muslim societies. Hamas and Hezbollah, especially, have established themselves as organizations capable of addressing the everyday problems of their constituencies: setting up day care, kindergartens, schools, medical clinics, youth and women's centers, sports clubs, social welfare, programmes for free meals and health care.[296] Each has also become a powerful political party within their respective governments. So, instead of attempting to implode a society, they have used the age-old tactic of carrots and sticks, alternating between rewards and punishments, to gain control of a society and reshape it according to their own agendas.

In effect, Hamas and Hezbollah serve their constituencies even as they exploit them; they have become communal activists, but are actively pushing a national agenda while enjoying substantial financial and logistical support from their host populations.[297] To be sure, support and direction come from state sponsors such as Iran and Syria as well. However, the point is that Hamas and Hezbollah are not trying to destroy their host societies. Rather, they are performing the functions those societies have needed, but for a variety of reasons have not received, and are leveraging that performance for political influence.

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295 Lind, et al, "Changing Face of War": 26.
296 In contrast, most governmental bodies in the Middle East, generally perceived as corrupt and ineffective by Muslim communities, have failed to provide such basics. Shaul Mishal and Avraham Sela, *The Palestinian Hamas: Vision, Violence, and Coexistence* (New York: Columbia University, 2000), pp. 18–26; Sami G. Hajjar, *Hizballah: Terrorism, National Liberation or Menace?* (Strategic Studies Institute, U.S. Army War College, August 2002); Rohan Gunaratna, *Inside Al Qaeda* (London: C. Hurst, 2002), pp. 55, 227, 230.
297 Ed Blanche, "Al-Qaeda Recruitment," *Janes Intelligence Review*, 14 January 2002; Paul J. Smith, "Transnational Terrorism and the al Qaeda Model: Confronting New Realities," *Parameters*, vol. 32, no. 2, Summer (2002): 33–46.

Al-Qaeda is somewhat different in that its goal is to spark a global uprising, or *intifada*, among Muslims.[298] Its attacks have been designed to weaken the United States, other Western powers (which are seen as supporting corrupt and despotic regimes) and "apostate" Muslim governments.[299] Still, even its tactics are not the psychological "judo throw" envisioned by 4GW theorists. Instead, al-Qaeda attempts to inflict as many casualties and as much destruction as possible in the hope of provoking a response massive enough to trigger a general uprising by the Islamic community, or to weaken Coalition resolve. The means it uses include "funding and training Islamic and ethnic guerilla movements, issuing propaganda aimed at inspiring freelance jihadists to commit acts of terrorism, and organizing and conducting complex attacks on countries it sees opposing it."[300] Al-Qaeda was only one of many jihadist groups, many of which were opposed to its methods and sought to marginalize it. To elevate this group to the status of a super-terrorist organization is simply too much of a stretch.

Moreover, the proponents of 4GW wish us to conclude that most of the wars of the modern age, which they claim were characterized by firepower or maneuver, were narrowly focused on military power and, unlike the super-insurgencies of the information age, rarely involved the integration of political, economic, and social power. Even a cursory review of the Napoleonic and the First and Second World Wars reveals that this is not true. Clausewitz thought that Napoleon had in fact brought warfare nearest to its "absolute" form, meaning that Bonaparte had taken war to a hitherto unsurpassed level of violence, mobilized the French populace to the extent possible at the time, and attempted to control information through various organs of the state.[301] In Napoleon, the full political and military powers of the French state were brought together under one person.

Step Three: Assessment. 4GW has failed both of the previous tests, and thus we need not proceed to the third step. However, we will do so to illustrate how

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298 Michael Scheuer, *Through Our Enemies' Eyes: Osama bin Laden, Radical Islam, and the Future of America, revised edition* (Washington D.C.: Potomac Books, 2006); Fawaz A. Gerges, *The Far Enemy: Why Jihad Went Global* (Cambridge: Cambridge University, 2005).

299 U.S. Department of State, Office of Coordinator for Counterterrorism, *Country Reports on Terrorism 2004*, Washington, D.C., April 2005, pp. 7–8. These attacks killed about 1,500 and wounded about 4,000 people, not including the many victims of operations in Iraq. One-third of all attacks involved non-Western targets, but the bulk of the victims were Muslims. National Counterterrorism Center, *A Chronology of Significant International Terrorism for 2004*, Washington, D.C., April 27, 2005, pp. 81–82. International terrorists were responsible for 190 attacks during 2003, down from 198 in 2002, and 355 in 2001; the casualty total was 1,888 in 2003, down from 2,742 in 2002, and 3,875 in 2001. U.S. Department of State, *Patterns of Global Terrorism*, Washington, D.C., 2003.

300 "Homeland Security. Al-Qaeda", *Global Security.org*, n.d. (online 18 Apr 2007).

301 Clausewitz, *Vom Kriege* (1991), book VIII, ch.. 3B, pp. 971–73.

the third step might work. The purpose of this step is to determine what new knowledge the theory of 4GW adds to what we already know about warfare. Alas, even if it had passed the first two tests, the theory would add very little to our knowledge of war. It should not surprise anyone, for instance, that non-state actors, whether insurgents, terrorists, guerillas, street gangs, or other nefarious characters, are trying to use the enhanced mobility that has come about through globalization to achieve their ends.[302] The literature on globalization is now quite extensive, and while scholars will continue to debate certain aspects of it, there is at least a growing consensus that it has dramatically increased the mobility of people, weapons, and ideas. It was, therefore, virtually inevitable – and by no means unforeseen – that a marriage of sorts would develop between terrorism and globalization. In effect, this marriage is all there is to the phenomenon that 4GW calls a "super" or "evolved insurgency," or a "new generation" of warfare.[303]

    Terrorists, guerillas and similar non-state actors have been studied by noted experts, such as Walter Laqueur, Ian Beckett, Peter Bergen, Marc Sageman, Michael Scheuer, Bruce Hoffman, Stephen Ulph and many others, have added, and continue to add, to our wealth of knowledge.[304] These authorities have devoted considerable time and intellectual energy to understanding the various phenomena of guerilla warfare, insurgencies, terrorism, and their various combinations and evolutions. The difference now is that, with the spread of information and communication technologies and the rise in travel opportunities, all of which have become associated with globalization, terrorists enjoy enhanced access to their adversary's political will.

    In sum, 4GW's logical and evidentiary bases are too deeply flawed for us to take it seriously: it is an elaborate speculation, but not a theory.

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302 Thomas Friedman, *The World is Flat: A Brief History of the 21st Century* (New York: Farra, Strauss, Giroux, 2005); and *The Lexus and the Olive Tree* (New York: Anchor, 2000), p. 9, which offered perhaps the first definition of globalization: the dispersion and democratization of technology, information, and finance.

303 Hammes, "4th-generation Warfare": 42.

304 Walter Laqueur, *Guerilla Warfare: A Historical and Critical Study* (Boulder: Westview, 1984); Ian F. W. Beckett and John Pimlott, eds, *Armed Forces and Modern Counterinsurgency* (New York: St. Martin's, 1985); Peter L. Bergen, *Holy War, Inc.: Inside the Secret World of Osama bin Laden* (New York: Touchstone, 2002); Marc Sageman, *Understanding Terror Networks* (Philadelphia: University of Pennsylvania Press, 2004); Michael Scheuer, *Imperial Hubris: Why the West is Losing the War on Terror* (Washington, DC: Brassey's, 2004); and Scheuer, *Through Our Enemies' Eyes*; Bruce Hoffman, *Combating Al Qaeda and the Militant Islamic Threat*, testimony presented to the U.S. House Armed Services Committee, Subcommittee on Terrorism, Unconventional Threats and Capabilities, February 16, 2006 (Santa Monica: RAND, 2006); Bard E. O'Neill, *Insurgency and Terrorism: Inside Modern Revolutionary Warfare* (Washington, D.C.: Brassey's, 1990); and Rohan Gunaratna, ed., *The Changing Face of Terrorism* (Singapore: Eastern Universities, 2004).

Still, the failure of contemporary military theory includes more than the deficiencies of individual speculations. Over time, military theory has come to focus on winning battles, rather than winning wars. Collectively, it is now reflective of a "way of battle," particularly within the US military, rather than a "way of war."[305] Unfortunately, the mere winning of battles, important as it is, rarely proves sufficient for advancing one's political or strategic aims. Recent events in Afghanistan and Iraq (and Lebanon) reveal just how important it is to have a genuine way of war rather than merely a way of battle. Consequently, contemporary military theory must adopt a more holistic perspective, one that considers the use of force to achieve strategic ends that go beyond merely subduing an opponent. In this regard, the third step of our system of verification can prove quite valuable, as it requires us to situate individual theories, concepts, and even principles within a larger knowledge structure. In the process of doing so, we can identify the extent to which those theories speak to the broader phenomenon of war as opposed to the narrower activity of battle.

A WAY OF WAR OR A WAY OF BATTLE?

A battle-focus concentrates on defeating an opponent militarily. It seeks tactics and stratagems that will destroy an opponent's physical and psychological capacities to resist, and do so in the most efficient way resources will allow. Under this view, the aim of overcoming an adversary becomes an end in itself, and the attainment of policy objectives is seen as something that does not fall within the scope of war, even though their realization might require the extensive and prolonged use of military force.

A war-focus, in contrast, means having a holistic view of conflict, one that sees the purpose of war as the accomplishment of preferred policy aims. It does not overlook the essential task of defeating an opponent, but does not stop there either. A war-focus considers military victory as a means to an end. Accordingly, political ends decisively influence the way in which, and the extent to which, an adversary is subdued.

In the aftermath of successful military operations in Afghanistan, a number of political figures and defense analysts proclaimed the arrival of a "new" American way of war, a style of fighting purportedly based on the novel application of knowledge, speed, and precision.[306] The initial phases of Opera-

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305 This is discussed in more detail in Antulio J. Echevarria II, *Toward an American Way of War* (Carlisle, Pa.: US Army War College, Strategic Studies Institute, 2004).

306 Donald H. Rumsfeld and Tommy R. Franks, "Summary of Lessons Learned", Prepared Testimony by SECDEF Donald H. Rumsfeld and Gen. Tommy R. Franks, presented to the Senate Armed Services Committee, July 9, 2003. See also the remarks by Vice President Dick Cheney, "A New American Way of War," to the Heritage Foundation, May 1, 2003, which ascribes many of the same characteristics to a new style of American warfare.

tion Iraqi Freedom (OIF), which featured the fall of Baghdad in record time and with remarkably low casualties on both sides, seemed to validate these claims. As subsequent stages of the campaign unfolded, however, it became clear that the earlier proclamations were premature.[307] The US military did not yet have a way of war, only a way of *battle*. Moreover, two historians of some renown, the late Russell Weigley and Max Boot, wrote important works that essentially confirm, though without attempting to, that the American way of war has long been in reality a way of battle.[308]

Put simply, the difference between a war-focus and a battle-focus devolves to whether we approach conflict, and thus arrange our theories, doctrine, organizations, and capabilities principally to achieve policy success, or to attain military victory. To be sure, as Clausewitz pointed out, political and military ends need not be at odds; policy goals can have a "warlike" character that makes them almost indistinguishable from military aims.[309] Even in such cases, however, policy goals are generally not realized until well after military ones, that is, with the completion of political, social, and economic reconstruction, or at the other extreme, with the full exploitation of those resources when acquired through conquest.

OIF provides a recent example of this battle-focus. Its information campaign, for instance, convinced the bulk of the Iraqi army to abandon its vehicles and fighting positions and "go home" rather than offer resistance. On this score, it was lauded as a brilliant tactical coup, as indeed it was. However, this coup, while brilliant on one level, proved to be a blunder on another because it actually hindered the accomplishment of the overall strategic objective of installing a stable and responsible government in Iraq, since it enabled Iraqi soldiers to take their personal weapons home. That, in turn, compounded the security problems that Coalition forces encountered in the stability phase of the conflict.

In its present form, military theory facilitates and encourages such thinking. For instance, a common definition of center of gravity – "those characteristics, capabilities, or locations from which a military force derives its freedom of action, physical strength, or will to fight" – reflects a decidedly battle-oriented focus.[310] It centers on eliminating or reducing an opponent's physical and psy-

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307 One of the proponents of the new way of war now admits its principles were inadequate. Compare: Max Boot, "The New American Way of War," *Foreign Affairs*, vol. 82, no. 4 July/August (2003): 41–58; and Max Boot, "The Struggle to Transform the Military," *Foreign Affairs*, vol. 84, no. 2 March/April (2005): 103–18.

308 Russell F. Weigley, *The American Way of War: A History of U.S. Military Strategy and Policy* (Bloomington, IN: Indiana University, 1973) and Max Boot, *Savage Wars of Peace: Small Wars and the Rise of American Power* (New York: Basic Books, 2002).

309 Clausewitz, *Vom Kriege* (1991), book I, ch. 1, pp. 211–12.

310 For the joint definition of centre of gravity, see Joint Chiefs of Staff, *Joint Publication 3-0. Joint Operations*, Washington, D.C., 17 September 2006, p. GL-4. Hereafter, JP 3-0.

chological capacities to fight, without considering how the way in which those capacities are reduced might affect the accomplishment of policy aims. It also precludes the possibility that the center of gravity might lie *not* in an opponent's physical or psychological capacity to fight, as theory and doctrine maintain, but rather in the successful political and economic reconstruction of the vanquished state, as in Iraq.[311]

PRINCIPLES OF WAR OR PRINCIPLES OF BATTLE?

What follows is a brief illustration of how a battle-focus permeates contemporary military theory. The principles of war have a long history, reaching back nearly two centuries. Yet, the focus of these principles, which may differ in detail from nation to nation but are generally similar in concept, has almost always been about overcoming an opponent. Consequently, they have really been principles of battle more than principles of war.[312] The US military has recently renamed them principles of operations, which is at best a compromise. However, that only makes the lack of any genuine principles of war more apparent.

The US military now recognises twelve principles of (joint) operations.[313] Nine are the so-called traditional principles: objective, offensive, mass, economy of force, maneuver, unity of command, security, surprise, and simplicity. Three others have been added, which were originally developed for operations other than war: restraint, perseverance, and legitimacy. None of the twelve actually amounts to a genuine principle of war, however, since all pertain to the act of fighting, or gaining a tactical advantage over an adversary, a critical task to be sure but, as we have said, often not sufficient.

Objective: "The purpose of the objective is to direct every military operation towards a clearly defined, decisive, and achievable goal."[314] Objective can apply to the strategic, operational and tactical levels of war. However, that does not make it a principle of war, unless objective emphasises the need for ways and means to translate military victory into policy success. Unfortunately, the roles that political, economic, and informational objectives might play in achieving the overall aim, and the need to coordinate them with the military effort, are not included in the definition, despite the fact that joint doctrine continues to stress the critical nature of interagency coordination. In any case, the crux of the issue is not determining whether to remain steadfastly fixed on accomplishing the

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311 Antulio J. Echevarria II, "Clausewitz's Center of Gravity: It's *Not* What We Thought", *Naval War College Review*, vol. 56, no. 1, Winter (2003): 71–78.
312 The following discussion is presented in more detail in Antulio J. Echevarria II, "Principles of War or Principles of Battle?" in *Rethinking the Principles of War*, ed. Anthony D. McIvor (Annapolis: Naval Institute Press, 2005), pp. 58–78.
313 JP 3-0, Appendix A.
314 JP 3-0, Appx. A, p. A-1.

objective or to be flexible enough to adapt quickly when it changes. Instead, it is learning *if*, *when*, and *how* the objective should change. Objective is thus not a true principle of war, though if modified it could provide the basis for one.

Offensive: "The purpose of an offensive action is to seize, retain, and exploit the initiative."[315] Like objective, the offensive can also apply to every level of war. However, offensive is simply an unsubstantiated assertion about a presumed advantage, not a principle. It presupposes that the act of being on the offensive gives the attacker certain coveted advantages, such as the opportunity to strike first and the ability to seize and retain the initiative. However, these advantages are more apparent than real. In martial arts, for example, striking first is not always wise; a skilled opponent can take advantage of an attacker's momentum to throw him off balance and render him vulnerable, thereby turning a presumed advantage into a disadvantage. The offensive (like the defensive), therefore, is just a descriptor, and a potentially misleading one at that: a combatant is said to be either on the offensive or on the defensive, but neither is necessarily synonymous with having the advantage. The offensive is thus neither a principle, a principle of operations, nor a principle of war.

Mass: "The purpose of mass is to concentrate the effects of combat power at the most advantageous place and time to produce decisive results."[316] Due to the destructive power of modern chemical, biological, radiological, nuclear, or high-explosive (CBRNE) weapons, the US military modified the principle of mass from its original sense – namely, a concentration of forces to maximise combat power at the point of decision – to the idea of "massing effects." Concentrating one's forces tends to turn them into a lucrative target which makes their destruction by airpower, or nuclear, chemical or other weapons that much easier. However, modern conflict reveals that the concentration of forces still occurs, it just does so on a larger geographic scale. In Operation Iraqi Freedom, for example, five (eventually six) of twelve existing carrier battle groups deployed to the Persian Gulf and the Mediterranean Sea – and thus were not available for use elsewhere. When viewed on a global scale, this does indeed represent a concentration of forces. Regardless of the scale involved, mass applies strictly to the act of overcoming an opponent. It is thus a principle of battle, not of war.

Economy of Force: "The purpose of the economy of force is to allocate minimum essential combat power to secondary efforts."[317] Economy of force is

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315 Ibid.
316 Ibid.
317 JP 3-0, Appx. A, p. A-2.

merely the complement of mass. By exercising it in certain locations, we can achieve mass elsewhere. In a sense, OIF saw an attempt to supplant mass with economy of force. That attempt succeeded well enough in the initial phases of the conflict. However, it failed completely when military operations shifted from major combat operations to providing security for reconstruction efforts. Mass thus proved more appropriate for maintaining control over key people and places, particularly as the conflict morphed into a counterinsurgency. Like mass, economy of force is thus a principle of battle rather than of war.

Security: "The purpose of security is to never permit the enemy to acquire unexpected advantage."[318] Security assumes a new meaning when considered within the context of current reconstruction efforts. Traditionally, security applied only to friendly forces, and it essentially became synonymous with the term force protection, a counter to surprise. However, OIF illustrated the importance of security for reconstruction efforts, vital activities when regime change and the establishment of a viable democratic government are objectives. Thus, the principles of mass and security go hand-in-hand, especially with regard to the conduct of security and stability operations. They remain principles of operations rather than of war, but their value in the whole process of turning military successes into political ones has been under-appreciated. In many ways, both are prerequisites for the realization of policy aims.

Maneuver: "The purpose of maneuver is to place the enemy in a position of disadvantage through the flexible application of combat power."[319] The underlying purpose of maneuver is to put one's opponent at a positional disadvantage, which can apply to diplomacy as well as to combat. However, we rarely view it in the former sense, though the idea of political maneuvering is an old one. Maneuver can apply to any level of war, but most of the literature on the topic addresses only tactical and operational maneuver. Its traditional components are fire and movement. Thus, it has historically functioned as a principle of battle rather than of war, though it has obvious potential for application beyond physical fighting.

Unity of Command: "The purpose of unity of command is to ensure unity of effort under one responsible commander for every objective."[320] Unity of command essentially means unity of effort. While it has been a military shibboleth for some time, at the level of policy formulation it runs counter to such fun-

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318 Ibid.
319 Ibid.
320 Ibid.

damental safeguards as checks – and balances and balance – of powers. The principle underscores the need to be of one mind in military endeavours, and it applies equally well to the strategic, operational and tactical levels of war. The value of coordinating the efforts of allies and coalition partners is obvious. The need for coordination is just as apparent for directing the elements of national power. However, in this case the value is more theoretical than practical, since political, military, economic, and informational power tend to operate at different rates of speed. Some types of military action can have an impact long before economic sanctions or embargos take effect. Thus, it is a principle more appropriate for battle than war.

Surprise: "The purpose of surprise is to strike at a time or place or in a manner for which the enemy is unprepared."[321] Although surprise can occur on any level of war, it amounts to a principle of battle, since it deals almost exclusively with overcoming an adversary. Essentially, surprise is the use of unexpected ways or means to gain an advantage by causing the psychological and perhaps physical dislocation of an opponent. The purpose of surprise is thus to render the opponent easier to defeat by diminishing his psychological and physical capacity to resist. The ways and means employed to achieve it, of course, need not be military in nature. However, surprise hardly applies to stability and support operations, or to reconstruction efforts, which constitute the critical end game of war where policy aims tend to be realized. Surprise is therefore a principle of battle.

Simplicity: "The purpose of simplicity is to prepare clear, uncomplicated plans and concise orders to ensure thorough understanding."[322] The principle of simplicity was originally intended to help mitigate the effects of fear, friction, chance, uncertainty, and exertion; all of these tend to produce high levels of stress among combatants, which in turn makes the activities associated with warfare more difficult to accomplish. The assumptions underpinning simplicity as a traditional principle of war are, first, that the simpler a plan is, the greater its chances of being understood and executed properly. Second, the fewer moving parts a system has, the less likely it is to malfunction. However, these assumptions are not always valid. A javelin has fewer moving parts than an assault rifle, but under most circumstances, troops would opt for the latter. To be sure, a holistic view of war is more complex than one centered simply on battle. However, it is an absolutely essential point of view if the criterion for success is the accomplishment of policy aims. Simplicity is less a principle than a precaution,

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321 JP 3-0, Appx. A, p. A-3.
322 Ibid.

therefore. It serves to warn us against including extraneous issues in doctrine, planning and execution.

RESTRAINT, PERSEVERANCE, AND LEGITIMACY

The purpose of *restraint* is to limit collateral damage and prevent the unnecessary use of force. ... The purpose of *perseverance* is to ensure the commitment necessary to attain the national strategic end state. ... The purpose of *legitimacy* is to develop and maintain the will necessary to attain the national strategic end state.[323]

Restraint, perseverance, and legitimacy were originally developed as principles for operations other than war, but they are not really principles. Restraint (the judicious use of force) and perseverance (the physical and psychological capabilities to persist in the execution of protracted operations) really amount to little more than common-sense advice. Each requires a disciplined force, so one could make the case that the real principle here is discipline, or professionalism, though discipline is recognized as a military virtue rather than a principle. Legitimacy (the perceived legality and morality of war aims and operations conducted in pursuit of them) has become more important in today's global environment where political statements and physical actions can be captured and retransmitted almost instantly. However, legitimacy, unlike mass, is a subjective quality; both sides will claim it, and fight for it. The degree to which they acquire it often depends on the prejudices of the international community. It is thus not a principle of war or of battle, but a subjective quality that *can* become an important, if transitory, advantage through constant cultivation.

On the whole, the principles of (joint) operations, to the extent they are principles at all, are really only principles of battle. They focus almost exclusively on defeating an opponent, rather than on using force to achieve other policy aims. Military theory has, thus, let military practitioners down, as well as the societies which depend on them. It has focused on only part of the solution to the problem of how to employ military force successfully. Practitioners, who put so much on the line whenever military force is used, deserve more than that.

Military practitioners have surely not seen the end of conjectures and speculations passing themselves off as bona fide theories. However, unless we take measures to develop a system of verification, and to implement it, practitioners may well have seen the end of military theory. That would be more than a shame. It would mark a critical failure of the military as a profession. A profession that fails to cultivate its body of expert knowledge forfeits its status as a

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323 JP 3-0, Appx A, p. A-4; emphasis added.

profession.[324] If there is no specific professional knowledge worthy of the name, society has no need of the profession. Amateurs and part-time soldiers would prove just as effective, and perhaps less expensive. Military professionals, thus, have an interest in rehabilitating military theory.

To be sure, a system of verification will not prevent every speculation and conjecture from appearing in print, or drawing zealots. However, it should help establish some standards for the field. A tool, and a system of verification is only that, is only as good as the hand that wields it. Still, at present, we do not even have a tool. Without one, the future of military theory is nonexistent. With one, military professionals have a chance.

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324 Andrew Abbott, *The System of Professions: An Essay in the Division of Expert Labor* (Chicago: Chicago University, 1988); see also Don Snider and Gayle L. Watkins, eds, *The Future of the Army Profession* (New York: McGraw-Hill, 2002).

ON BOYD, BIN LADEN, AND FOURTH GENERATION WARFARE AS STRING THEORY

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by Frans Osinga[325]

> *"even though much about string theory still lies beyond the bounds of our comprehension, it has already exposed dramatic new vistas"*[326]

INTRODUCTION

Strategic theory is thriving, if the number of books and debates on the shape of future warfare and the utility of force is any indication. *Fourth generation warfare* features prominently in this intellectual endeavor. It is one of the "big ideas" or "grand narratives" in contemporary strategic discourse. The religiously inspired suicide attacks and the ensuing Global War On Terror seemed to validate the idea that a new sort of war was in the offing, one that was predicted in the original article on 4GW of 1989. With the bloody Iraqi civil war and US counterinsurgency operations, and continuous counterterror operations by US forces in Afghanistan and Yemen, 4GW has become iconic for this era, in particular within US military circles. Long a view elaborated only in opinionated journal articles, the idea of 4GW has gained "hard cover" status with the publication of Thomas X. Hammes' book *The Sling and the Stone*, a book which has inspired reactions of serious scholars. Its proponents have presented their views for high-level political and military advisers. Meanwhile the idea is being discussed in academic institutions from West Point to the colleges of Oxford and is finding resonance beyond the military community, even in organizations such as al-Qaeda.[327] It has also drawn dismissive comments.

But the problem with 4GW is its jelly-like character, which is variable in shape and substance, and refuses to be nailed to the wall. The main proponents of the idea of 4GW themselves readily acknowledge the evolving and multifaceted nature of the phenomena they are trying to make sense of and capture in a coherent concept. At least six 4GW authors can be identified, all describing in slightly different terms the phenomenon at various moments. They refer to

emerging incidents, and expanding the meaning of the concept by including some new elements gleaned from those incidents in the process. All authors look at the new tools available for non-state actors, but Hammes' recent study pays more attention to insurgencies abroad, while earlier papers looked at potential terrorist attacks with new technological tools on America's homeland. The idea, laid out in 1989, has now matured and refers to the 9/11 attacks and insurgencies in Afghanistan and Iraq.[328] Assessing 4GW therefore requires explanation first, and only after that critique.

Thus, after an introductory section on the nature of strategic theory, I will discuss the foundation upon which 4GW is built: the strategic thought of the late John Boyd. This discussion will shed light in particular on the strategic logic that 4GW puts the finger at. The third section shows how 4GW is part of, and feeds from, a larger debate about trends in non-Western – asymmetric or non-trinitarian - modes of warfare and the possible implications for the West. Against this background, the fourth section highlights the core trends and dynamics 4GW spotlights. These sections combined serve as an explanation of 4GW, but also position 4GW as an exercise in strategic thinking. Section five offers a summary of critiques of 4GW that have been developed in years past. A brief conclusion will suffice to answer what the merits are of 4GW. I will argue that 4GW may be akin to a string theory of contemporary strategic studies; not necessarily right, but certainly relevant even when turning out to be wrong in the end, for 4GW is a mode of strategic discourse, a valuable exercise in strategic thinking which produces a fascinating and worrisome synthesis of a variety of societal, technological, demographic, political and ideological developments. Obviously, this assessment is based on a particular expectation of what strategic theory should "do".

A NOTE ON STRATEGIC THEORY
Expectation Management
The original 4GW authors asked the question: "What does the future hold for war in the 21st Century, and how does it affect the American military forces?"

328 See for instance Harold Gould and Franklin Spinney, "Fourth Generation Warfare is Here", *Defense and the National Interest*, 15 October 2001 (online 19 Apr 2007); Thomas X. Hammes, "Insurgency: Modern Warfare Evolves into a Fourth Generation", *Strategic Forum*, no. 214, January (2005) for the inclusion of 9/11 and the Iraq insurgency respectively. See also the elaborate powerpoint presentation by G.I Wilson, Greg Wilcox and Chet Richards, such as "Fourth Generation Warfare & The OODA Loop; Implications of the Iraqi Insurgency" (December 2004); and by Chet Richards, *Conflict in the Years Ahead* (February 2005 and February 2006), all presentations on *Defense and National Interest* (online); Greg Wilcox and Gary I. Wilson, "Military Response to Fourth Generation Warfare in Afghanistan", *EmergencyNet News*, 5 May 2002 [Emergency Response and Research Institute (online)]; and Andrew Black, "Al-Suri's Adaptation of fourth Generation Warfare Doctrine", *Terrorism Monitor*, vol. IV, issue 18, 21 September (2006): 4–7.

4GW thus aspires to be strategic theory. Strategic theory concerns thoughts about making effective strategy and the proper use of force. Developing a good strategic theory is a highly problematic and daunting endeavor, and any effort to assess a theory should do so based on an appreciation of the peculiarities of strategic theory. Strategic theory is a strange animal indeed, deviating in some important respects from what is generally considered "proper" scientific theory.[329] Strategic theory cannot obtain a high level of predictive value. The study of strategic behavior falls within the social sciences where few laws have been established because phenomena of social science are complex, with many different influences or "causes" operating on a particular event. At best the social scientist can give only a probability that a particular action will be followed by the desired result.[330] As war too is complex, filled with danger, chance, uncertainty, emotions, and differential talents of commanders, there is no single all embracing formula explaining, describing and predicting strategy and its outcome, as Clausewitz noted. A positive doctrine for warfare is simply not possible, and theory therefore need not be a sort of manual for action.[331] However, as Garnett remarks, some of the most useful theories do not in any way meet the strict requirements of "scientific" theory. If "scientific" is associated with a predictive capacity of theory, indeed, most strategic theories fail.[332] But strategic theory is valuable because of its explanatory value. Despite the fact that generalization and hypotheses may enjoy only limited validity, they sometimes throw a good deal of light on strategic behavior under particular conditions and in particular periods of time. If a strategic theory offers better ways of explaining victories and losses it already has much utility for evaluation and policy-making; if it can provide some measure of plausible conditional prediction that a certain mode of behavior will result in a higher probability of success – or failure – it is extremely useful.

Moreover, strategic theories can be categorized in levels according to range of applicability and scope:[333]
- A level that transcends time, environment, political and social conditions and technology (for instance Clausewitz and Sun Tzu).

329 This section is derived from Frans Osinga, *Science, Strategy and War, The Strategic Theory of John Boyd,* Routledge, Abingdon, 2006, chapter 1.
330 Bruce Russett and Harvey Starr, *World Politics, A Menu for Choice,* San Fransisco, 1981, p. 32. Laws are hypotheses that are confirmed in virtually all of the classes of phenomena to which they are applied.
331 Carl von Clausewitz, *On War* (1976), p. 140.
332 John C. Garnett, *Commonsense and the Theory of International Politics* (London: MacMillan, 1984), p. 46.
333 Colin Gray, *Modern Strategy* (Oxford: Oxford University Press, 1999), pp. 125–26.

- A level that explains how the geographical and functional complexities of war and strategy interact and complement each other (Corbett on naval warfare).

- A level that explains how a particular kind or use of military power strategically affects the course of conflict as a whole (Mahan on the role of maritime power).

- A level that explains the character of war in a particular period, keyed to explicit assumptions about the capabilities of different kinds of military power and their terms of effective engagement (the use of air power as a coercive tool).

Obviously, level 1 (general strategic theory) aspires to a higher level of applicability than level 4 and must therefore be able to account for a greater number of phenomena and aspects of war than a theory that is more conditional in its aspiration as far as applicability is concerned. This also affects what one expects of a new body of thought on the dynamics of contemporary and future conflict. What all levels have in common though is the expectation of strategic theory to educate the mind by providing intellectual organization, defining terms, suggesting connections among apparently disparate matters, and offering speculative consequentialist postulates.[334] Theory is important in helping to educate and shed new light on war. That, and not the aim of developing a general theory which the Newtonian laws of physics for example hold up for long periods of time, is the purpose of strategic theory.

Strategic Theory and Muddy River Banks

Developing a strategic theory is difficult for several reasons. First, strategic theory needs to take into account the complex and multidimensional character of strategy and war. Good strategic theory must be holistic, paying due respect to the interdependency of the various elements and dimensions that give form to strategy.[335] The second problem facing strategic theorists is that the circumstance for which strategic theory is developed will be largely unknown and moreover unknowable much in advance of the moment of testing the strategic theory.[336] Moreover, strategic theory is evolutionary in the sense that it evolves by trying to incorporate changes into the strategic landscape, such as novel actors, states or terrorist groups, new technologies such as tanks, aircraft or nuclear weapons, or phenomena such as the impact of the industrial revolution or the rise of

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334 Ibid., p. 36.
335 Ibid., pp. 24–26.
336 Bernard Brodie, *War and Politics* (New York: MacMillan, 1973), p. 452.

mass emotions in nationalistically and ideologically inspired wars.[337] Strategists, not surprisingly, have had difficulty abstracting themselves from the features of a given war or period,[338] thus imparting a contemporary hue to their military thinking. Neither does the paradoxical nature of strategy favour theory development. Strategic theory needs to account for the fact that it is concerned with people that react, learn and anticipate. Precisely because a strategy worked once, it will likely be emulated or at least learned from, and subsequently the strategist must devise new constructs and hypotheses that provide a plausible expectation for success.[339] So, even when an underlying pattern is discovered and some level of predictability established, the paradoxical nature of strategy guarantees that the pattern will be altered.

This dynamic nature of strategy and war is, of course, not conducive to a steady growth of knowledge. Subsequently strategic theory development does not follow a clear cumulative growth path in which new theories build upon and improve former ones. Instead, the reader is left with an expanding number of partial theories, each of which has a limited range of applicability, be it bound by geography (continental, maritime, urban, jungle), dimension (air, land, sea), weapon technology and combat method (nuclear, terrorism, counterinsurgency, guerrilla), etc. The activities of a strategic theorist can perhaps be likened to someone who attempts to build a house on the muddy bank of a fast flowing river. The patch of sand constantly changes form, solidity and location due to the turbulence of the river, *and* because of the construction activities. The very fact that one places a stone so as to construct a foundation alters the environment. With war and strategic behavior so fundamentally in flux, strategic theory cannot aspire to high standards of parsimony or general applicability and validity, nor one that holds out for a long period of time. Neither should one necessarily expect an all embracing theory to develop from the various partial theories, nor a theory with a high level of predictive capability, the standard of "hard science". With that in mind, let's turn to 4GW.

TAKE ONE: 4GW AND JOHN BOYD
All authors of 4GW have in common that they build on the intellectual foundation laid by John Boyd.[340] Indeed, the first 4GW article published as early as

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337 See for instance Ken Booth, "The Evolution of Strategic Thinking", in *Contemporary Strategy*, eds John Baylis, Ken Booth, John Garnett and Phil Williams, vol. I, 2nd ed. (New York: Holmes & Meier, 1987).
338 Avi Kober, "Nomology vs Historicism: Formative Factors in Modern Military Thought", *Defense Analysis,* vol. 10, no. 3 (1994): 268.
339 Edward Luttwak, *Strategy, the Logic of War and Peace* (Cambridge, Ma: Harvard University Press, 1987).
340 This section draws on my book Osinga, *Science, Strategy and War …*, chapters 5 and 6 in particular.

1989 was authored by one of Boyd's close associate, Bill Lind, and a group of like-minded officers.[341] Often Boyd is remembered only for the famous OODA loop, in which a decisive advantage accrues to the side who can accomplish the cycle of observation, orientation, decision and action in the shortest time. This is partially correct, but understanding 4GW requires a more complete understanding of Boyd's legacy in strategic theory, for 4GW papers harbour several inter-related key notions found in Boyd's *A Discourse on Winning and Losing*:

- the notion of war as a dynamic process of action-reaction.
- an emphasis on factors other than military technology to explain success and failure, in particular the intangible – mental and moral – dimensions of fighting organizations.
- the metaphor of the opponent as a complex adaptive system, which highlights the element of adaptability as a key factor for success or failure in warfare.
- the dynamic of interaction and isolation; war is a "game" of evolution, and any open system that cannot maintain interaction with its environment will invariably suffer the fate of closed systems in dynamic environments: entropy and decreasing adaptability.
- the image of a swarm-like organization of agile, netted but relatively autonomously operating units, acting in "synch" through an "Auftragstaktik"-based command and control set-up based on implicit communication;
- The core attributes of manoeuver and moral conflict, concepts that concisely capture these themes and stand in contrast to the attritionist, force-on-force approach to warfare.

Adaptability and Organizational Learning

4GW studies contain the idea that the character of war evolves due to the dynamic of multi-dimensional action-reaction processes. Boyd's lectures on patterns in military history argued that societal, doctrinal and technological developments produce temporary military advantages which, over time, induce responses that aim to mitigate those advantages. Boyd also argued that military technology is just one of many non-technological drivers of change and determinants of success. 4GW authors share Boyd's concern with the traditional overreliance of the US military on technology and physical destruction. Instead of technology and the attritionist mindset, both of which Boyd regarded as related and at fault in the Vietnam War, Boyd focused on the intangibles of strategic interactions, such as time, the moral and mental dimensions, organizational culture, and non-

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341 See William Lind, Keith Nightengale, John Schmitt, Joseph Sutton, Gary Wilson, "The Changing Face of War: Into the Fourth Generation", *Marine Corps Gazette*, October (1989): 22–26.

technological factors of change. This view is incorporated in the well-known, simplified explanatory notion that warfare evolved through generations. 4GW is the next logical evolutionary step following 3GW which is marked by conventional, Western style military manoeuver warfare. In contrast, 4GW is distinctly non-conventional and non-military in character. It will be characterized by: very small independent groups or cells acting on mission-type orders; a decreased dependence on logistics support; emphasis on manoeuver; and psychological goals rather than physical ones. 4GW is a result of a learning process by groups that have seen the superiority of Western conventional military forces.

Boyd emphasized such organizational learning, and advocated the creation of adaptive organizations that can thrive amid a volatile environment despite prevailing and unavoidable uncertainty. In his view, the famous OODA-loop is much less a model of decision making than a model of individual and organizational learning and adaptation. In the words he used in the 1970s, it is a model of a "meta-paradigm", a "theory of intellectual evolution and growth". The first piece in *A Discourse on Winning and Losing* is an abstract investigation into cognitive processes, and the first key theme to emerge from this work is the fundamental uncertainty of our knowledge of our environment, with the subsequent need to continuously evolve our mental models so as to cope with the ever-changing environment. We need to learn and adapt, and be comfortable with the idea that our view of reality is only partly correct, and only for a while. Each action or decision we take in that respect is just a test to see if our hypothesis of reality is correct. At heart the OODA loop is an sophisticated epistemological model. Only in the most narrow interpretation may the OODA loop be equated with a decision making cycle and the idea that success accrues from completing this cycle faster than the opponent. In Boyd's more comprehensive view it stands for the processes of double loop learning, and not only pays attention to information, but also to the influence of culture, experience, worldviews, doctrine, etc. Indeed, the major overarching theme throughout Boyd's work is the capability to evolve, to adapt, to learn and deny such capability to the enemy. Boyd regards the contestants, the armies, their headquarters and societies in terms of living systems, as organisms, that aim to survive and prosper. To that end they – individuals, platoons, brigades, divisions, army corps, nations and any other type of social system – must observe, learn and adapt.

Therefore, he asserts in *Patterns of Conflict*, that the strategic aim should always be "to diminish the adversary's capacity to adapt while improving our capacity to adapt as an organic whole, so that our adversary cannot cope while we can cope with events/efforts as they unfold". At the tactical and operational levels, adaptation can be seen as a function of speed of action and reaction and of information availability. At the strategic level, Boyd notes, adaptation is more indirect and takes longer time intervals. It revolves around adjusting doctrines

and force structures and disorienting the opponent's orientation patterns, or mental images. At the grand-strategic level, adaptability revolves around shaping the political and societal environment, including an attractive ideology, and adopting a mode of warfare the opponent is ill-suited to wage. Leaders should develop attractive and inspiring national goals and philosophies that unite and guide the nation as well as attract the uncommitted. Meanwhile they should demonstrate the ruling government is corrupt, morally bankrupt, disconnected from the population, and provoke enemy actions that are considered disproportional and ineffective.[342] 4GW papers are pregnant with this notion.

Moral Conflict

These definitions were informed by the concepts of moral and manoeuver conflict, ideas that that are integral to 4GW papers, and that Boyd distilled by stripping bare the essential dynamics at play in Blitzkrieg-style manoeuver warfare and guerrilla warfare. In contrast to the attritionist approach, the rationale for physical action in Boyd's view is not the destruction of the enemy forces, but mental and moral dislocation, which would erode the cohesion of the enemy organization, which would subsequently facilitate piecemeal destruction of those forces, or would induce paralysis and/or surrender. Manoeuver conflict achieves this effect by disrupting the information flow and by playing on fear. Primarily positioned in the military domain, it posits that fire and movement are used in combination to tie up, divert or drain away the adversary's attention and strength to expose as well as menace and exploit vulnerabilities or weaknesses. The ensuring ambiguity, deception, novelty, and violence (or threat thereof) are used to generate surprise and shock. A welter of threatening events causes an overload beyond one's mental or physical ability to respond and adapt or endure.[343]

Moral conflict features particularly prominently in 4GW studies. Whereas manoeuver conflict was mostly geared towards the mental function of individuals and organizations, moral conflict homes in on trust, values and moral strength. It is based on, but transcends revolutionary war or guerrilla warfare, as does 4GW literature. Moral conflict focuses on the social bonds of communities, and reads like a description of the insurgency in Iraq and Afghanistan. The main idea comes from the logic behind the guerrilla warfare approach, which is to defeat the existing regime politically by showing they have neither the moral right, nor a demonstrated ability to govern. Guerrillas capitalize on the discontent and mistrust which are generated by corruption (real of imagined), exploitation, oppression, incompetence, and the unwanted presence of the exist-

342 John Boyd, "Patterns Of Conflict", unpublished presentation, p. 141.
343 Ibid., p. 114.

ing regime. Thus they can evolve a common cause or a unifying theme as a basis to organize and maintain mass support through a militant political program. They build an administrative and military organization, create a sanctuary, and a communications network under the control of the political leadership of the guerrilla movement. They attempt to subvert the government and convert people through propaganda, inspire civil disorder and selected acts of terrorism and hit-and-run raids by tiny, cohesive bands. These guerrilla bands do not engage in battle but instead retreat and melt into the environment. The government is encouraged to indiscriminately take harsh reprisals against the people to associate the government with the expanding climate of mistrust, discord, and moral disintegration. Simultaneously, guerrillas – such as Hamas or Hezbollah – aim to exhibit moral authority, offer competence, and provide social services, which assists in further eroding the government's influence, gaining more recruits and multiplying the base areas.[344]

Thus, the essence of the modern guerrilla campaign, according to Boyd, is to: (1) capitalize on corruption, injustice, incompetence, etc., (or their appearances) as a basis to generate an atmosphere of mistrust and discord to sever moral bonds that bind people to the existing regime. Simultaneously (2) the guerrillas share existing burdens with the people and work with them to root out and punish corruption, remove injustice, eliminate grievances, etc., as a basis to form moral bonds between the people and guerrillas, to bind people to guerrilla philosophy and ideals. The conceptual implication of this is that guerrillas

> by being able to penetrate the very essence of their adversary's moral-mental-physical being, they generate many moral-mental-physical non-cooperative (or isolated) centers of gravity, as well as subvert or seize those centers of gravity that the adversary regime must depend upon, in order to magnify friction, produce paralysis, and bring about its collapse.[345]

Meanwhile, "guerrillas shape or influence the moral-mental-physical atmosphere so that potential adversaries, as well as the uncommitted, are drawn toward the guerrilla philosophy and are empathetic toward guerrilla success".[346]

Synthesizing the essence of guerrilla warfare and Blitzkrieg, Boyd concludes that both aim to:[347]

- penetrate an adversary to subvert, disrupt or seize those connections, centers, and activities that provide cohesion (e.g., psychological/moral bonds, communications, lines of communication, command and supply centers).

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344 Ibid.
345 Ibid., p. 91.
346 Ibid.
347 Ibid., p. 98.

- exploit ambiguity, deception, superior mobility and sudden violence to generate initial surprise and shock, again and again and again.
- exploit subversion, surprise, shock, disruption and seizure to generate confusion, disorder, panic, etc, thereby shattering cohesion, paralyzing effort and bringing about adversary collapse.

The abstract "art of success" thus becomes to:
- appear to be an unsolvable cryptogram while operating in a directed way to penetrate adversary vulnerabilities and weaknesses to isolate him from his allies, pull him apart, and collapse his will to resist, yet:
- shape or influence events so that we not only magnify our spirit and strength but also influence potential adversaries as well as the uncommitted so that they are drawn towards our philosophy and are empathetic to our success.

Interaction and Isolation

At the most abstract level, he noted in his presentation *The Strategic Game of ? & ?*, these efforts to survive and adapt resemble a game of "interaction and isolation". Based on his reading of military history along with a multidisciplinary study of the dynamics of social organisms (including chaos and complexity theory), he came to the conclusion that survival depended on the ability to maintain interaction with the environment. Conversely, whether they concern tactics or grand strategy, all activities must concern a quest to isolate one's enemy from his external environment. Greg Wilson and Chet Richards have used this concept to illustrate the strategic problems the US is encountering in fighting the 4GW insurgency in Iraq, stating that the grand strategy is to isolate your enemy across three essential vectors (physical, mental, and moral), while improving your connectivity across those same vectors.[348]

- **Physical isolation** is accomplished by severing communications both to the outside world (i.e. allies) and internal audiences (i.e. between branches of command and between the command organization and its supporters). For instance, the destruction of al-Qaeda's training camps and visible communications systems have resulted in a degree of isolation. However, the network-based organizational structure of al-Qaeda and its ability to manipulate the media to send messages to supporters have mitigated this effort.
- **Mental isolation** is done through the introduction of ambiguous information, novel situations, and by operating at a tempo an enemy cannot keep up with. A lack of solid information impedes decision making. To illustrate: the rapid emergence of new threats and the myriad of geographically dispersed

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348 See Wilson, Wilcox and Richards, "Fourth Generation Warfare …"; and Richards, "Conflict in the Years Ahead".

attacks that require response (from Spain to Saudi Arabia – from Basra to Mosel) have served to isolate the US on the mental plain. It is very difficult, due to ambiguity of information, to determine who the enemy is.

- **Moral isolation** is achieved when an enemy improves its well being at the expense of others (allies) or violates rules of behaviour they profess to uphold (standards of conduct). When these moral rules are violated, it is very hard to recover, as the excesses at the Abu Ghraib prison demonstrate. The evidence indicates that the US intentionally (in that there was a climate of urgency that permitted it) violated these rules due to a desire to gain information needed to fight guerrilla groups in Iraq. There has not been any evidence that al-Qaeda sponsored operations have drastically violated any internal moral codes.

In short, isolate an opponent and in due course it will loose internal cohesion and external support, its delayed and misinformed reactions will be ineffective and it will fail to adjust correctly to the changed environment. Change the opponent from an open into a closed system and he will suffer the fate of all closed systems due to the second law of thermodynamics: entropy.

Agile, Networked Cells

The corollary, of course, is the imperative to maintain constant interaction between the units of an organization and between the organization and its environment, and the challenge is maintaining cohesion while conducting fluid, varied and rapid actions, despite uncertainty and threats. 4GW papers incorporate Boyd's views on organizational culture, structure and communication processes, which were consistent with his emphasis on adaptability, and the dynamics of interaction-isolation. His views were informed by guerrilla and stormtrooper practices, which always displayed, according to Boyd, stealth, fast tempo, fluidity of action and cohesion of small bands and larger units.[349] Such units had the latitude to take the sort of initiative required to adapt to the level of uncertainty and volatility of their environment. Decentralization was the key. Whereas standard Pentagon solutions to uncertainty involved increasing investments in C4ISTAR equipment, Boyd aimed to create adaptable, learning organizations consisting of informally networked teams that could comfortably operate in an insecure environment due to their reduced information requirements. Combined, it would result in a resilient organization.

This also required a departure from the standard top-down hierarchical organizational model and processes. Studies of neurophysiology, systems theory, emerging insights from cognitive sciences, historical works on command

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349 Ibid., p. 90.

and morale, and studies of individual and organizational learning, all confirmed his idea that adaptability required an organization marked by trust and open communications between commander and troops; as well as by a reliance on implicit communications, formed by social bonds, training, shared experiences, doctrine and clear objectives. This needed to be combined with a fostering of low-level initiative and a tolerance for failure. If everyone understands clearly and is attuned to the organization's purpose and/or the commander's intent, explicit communication beyond the objective is superfluous. Self-organization will be the result.

In his presentation *Organic Design for Command and Control*, Boyd thus advocates an agile, cellular organization – networked through ideology, shared ideas, experience, trust, goals, and doctrine – that thrives in uncertainty and fosters innovation, creativity and initiative. Such a set-up would enable rapid and varied actions in non-linear fashion – distributed operations is the term that is in fashion these days – all unified ("in harmony") across the theater through a shared, implicit perspective on the environment and an awareness of what is expected by higher commands due to the use of *Auftragstaktik*. 4GW authors see this organizational model as a key feature – and strength – of non-state groups such as Hamas and al-Qaeda.

Boyd's work thus offered 4GW authors a way of thinking about strategic dynamics. In his own day Boyd was interested in particular in inspiring strategic discourse and wide-ranging and critical thinking. It is this motive that underlies 4GW papers. Boyd's work also provided 4GW authors with an unconventional lexicon to highlight strategic dynamics and a new conceptualization of strategic behaviour and strategic thinking. The theme of adaptability, the network structure, and the category of moral conflict in particular are evident. 4GW papers depict a war that is played out in the moral dimension; it is a contest of ideas and ideologies. 4GW warriors are bound by shared ideology, values and worldviews, and operate as semi-autonomous agile, netted groups, applying guerrilla war methodologies. While constantly adapting their tactics, their strategic aim is to destroy the moral bonds that permit the adversary to exist. They play the game of interaction and isolation. Instead of waging war in the military dimension, they wage it in the political and moral arena.

TAKE TWO: NON-WESTERN MODES OF WARFARE

That arena is also the focus of a stream of literature that focused on ethnic and civil war in the Middle East, Africa and the Balkans and on the problems of failed states. From the beginning, the 4GW argument has been strongly informed by these studies, which fuelled the argument that the West had lost sight of other non-Western (asymmetric) modes of warfare and of the cultural nature

of war.[350] We can regard 4GW as one end of strategic thought, with the RMA discussion, the idea of "Net Centric Warfare", or 'Spectator Sport Warfare', all inspired by the post-Cold War "American Way of War", holding on to the other end of the rope. Indeed, 4GW is a counterpoint to those ideas. In a time that the Pentagon was focusing on emerging information technology to refine maneuver warfare (3GW), 4GW authors, along with many others, were pointing at *societal* phenomena that they consider more dominant influences on the nature of contemporary and future conflict, the reasons and motives they start or continue, the actors involved, the methods employed and parameters of success. Several studies argued it implied a reconceptualization of the idea of war, the irrelevance of the Clausewitzian trinitarian paradigm which undergirded the Western conceptualization of nation state warfare, and the rise of non-trinitarian warfare, a line of argumentation embedded in 4GW literature.

Non-Trinitarian Warfare

In 1991 Martin van Creveld argued in *The Transformation of War* that the Western view of war is not suitable to understand the dynamics of future conflicts. The Western model of state versus state warfare by large armoured forces is obsolete, due to the ever-present nuclear threat. Second, the state as we know it (government separate from ruler) is also waning. It became the dominant form of political organization in Europe only in 1648. In many parts of the world, states were only established in the 19th and 20th centuries through colonization/decolonization. Some parts of the world never developed functioning states at all. Even where states were established, other organizations are now coming to the fore and beginning to wage war not involving governments, people and armies, but groups we today call "terrorists", tribes, religious groups, commercial groups, criminal groups, insurgencies: in short, non-state actors.[351] Such non-state actors wage war in a fundamentally different way than nation states. War is a cultural phenomenon, and for many peoples war may have different purposes (symbolic, ritual or existential) and follow different rules, and may not be that linked and constrained by politics, and not be as instrumental as Western

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350 This section draws on my "Een nieuwe totale oorlog als dialectisch moment" [A New Total War as a Dialectic Moment], *Vrede en Veiligheid*, vol. 30, no. 4 (2001): 447–480.

351 See Martin van Creveld, *The Transformation of War* (New York: The Free Press, 1991); and *The Rise and Decline of the State* (Cambridge: Cambridge University Press, 1999).

nations have become accustomed to.[352] This fundamental difference produces very different strategic dynamics. With the Western model of the nation state losing ground, this non-trinitarian way spells changes in terms of by whom future wars will be fought, what they will be about, how they will be fought, what wars will be fought for and why people participate in them.

Whereas states have strongly regulated war and violence, and at least make a deliberate effort to tie war to specific political cost/benefit calculations, such non-state actors (and sometimes states) wage war because of grievances, objectives, glory of individuals, or the status in a tribe; to obtain the spoils of war – booty, slaves, territory, women; to obtain prisoners for religious reasons; because of doctrinal, ethnic or religious differences; because of revenge and justice to avenge perceived wrongs; or because of community honour. Literally everybody takes part in such conflicts, there are no non-combatants. Distinctions between war and crime will break down, as will the difference between armed forces and civilians. Battles will be replaced by skirmishes, bombings and massacres. Much of the task of defending a society against non-trinitarian warfare will fall to private security companies, with a corresponding decrease in the utility, size and technological complexity (cost) of military forces. Thus, armies will shrink in size and whither away, to be replaced by police-like security forces on the one hand and armed gangs on the other. Considering the emotions involved, the side with the more rational interests will most likely lose. The Western model of the nation state as the dominant form of political organization and its associated form of warfare will go the way of the dinosaurs.

Wars of the Third Kind

Political scientists Kalevi Holsti continued this argument, pointing out the fundamentally different political processes in a large number of "Wars of the Third Kind", while Mary Kaldor labelled them *New Wars*.[353] Both agree that security between states in the Third World has become increasingly dependent upon security within those states and international security problems are essentially

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352 This is the contested but nevertheless pertinent argument that historians John Keegan, Martin van Creveld and some others make. For a concise discussion and refutation, see Christopher Bassford, "John Keegan and the Grand Tradition of Trashing Clausewitz", *War and History*, vol. 1, no. 3 (1994). For a recent study of military cultures which highlights the alternatives to the Western instrumentalist view of war, see for instance Christopher Coker, *Waging War Without Warriors, The Changing Culture of Military Conflict* (Boulder, Co.: Lynne Rienner, 2003).

353 Mary Kaldor, *New and Old Wars, Organized violence in a Global Era* (Cambridge: Polity Press, 1999).

a problem of domestic politics.[354] Identity politics is central to these problems: the exclusive claim to power on the basis of tribe, nation, clan or religious community. Moreover, war is not regarded as something that needs to be finished. These protracted wars rage in regions where local production has declined and state revenues are very low, owing to widespread corruption. In this context the warring states seek finance from external sources, diaspora support, taxation of humanitarian aid and through negative redistribution of resources locally: looting, pillaging, enforcing unequal terms of trade through checkpoints and other restrictions, exhorting money, etc.[355] All of these sources of finance depend on continued violence. The consequence is a set of predatory social relations that have a tendency to spread.[356] Because the various warring and criminal parties share the aim of sowing fear and hatred, they operate in a way that is mutually re-enforcing, helping each other to create a climate of insecurity and suspicion.[357] This echoes van Creveld's statement that "there exists a sense in which war, more than any other human activity, can make sense only to the extent that it is experienced not as a means but as an end".[358]

Indeed, both agree with van Creveld that modern war is of an intrastate nature in which the Western rules and conventions guiding and constraining the conduct of war do not apply at all. There are no fronts, no campaigns, no bases, no uniforms, no publicly displayed honours, and no respect for the territorial limits of states. In wars between communities as opposed to armies, everyone is automatically labelled a combatant merely by virtue of their identity, and every home, church, government office, school, highway and village is a battleground.[359] Conventional battles of large armies are absent here and military victory is not decisive, nor aimed at. Instead, territorial gains are aimed at by acquiring political power. Weapons and methods to gain political power include ethnic cleansing, rape, assassination of key figures of the opponent, and terror.[360] "This is a new age of warlordism," Ralph Peters maintains: "paramilitary warriors-thugs whose talent for violence blossoms in civil war, defy

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354 Kalevi J. Holsti, *The State, War, and the State of War* (Cambridge: Cambridge University Press, 1996), pp. 14, 15. Others too have described this type of conflict. See for instance Michael Ignatieff, *Blood and Belonging* (London: Vintage, 1994); and *The Warrior's Honor* (London: Vintage, 1999); or Robert D. Kaplan, *The Coming Anarchy* (New York: Vintage, 2001).

355 Mary Kaldor, "Introduction", in Mary Kaldor, ed., *Global Insecurity* (London: Cassell/Pinter, 2000), pp. 5–6.

356 Ibid.

357 Kaldor, *New and Old Wars ...*, p. 9.

358 van Creveld, *The Transformation of War*, p. 221.

359 Holsti, *The State…*, pp. 36–39.

360 Kaldor, "Introduction", p. 6.

legitimate governments and increasingly end up leading governments they have overturned".[361]

These wars are difficult to approach from the Clausewitzian paradigm, according to van Creveld: "the main purpose of the use of force in Europe for the past 350 years has been primarily to advance and/or protect the interests of the state. War has been political". However, "war as a continuation of politics by other means" no longer applies "when the stakes are highest and a community strains every sinew in a life and death struggle. The ordinary strategic terminology fails. To say that war is 'an instrument' serving the 'policy' of the community that 'wages' it is to stretch all three terms to the point of meaninglessness. Where the distinction between ends and means breaks down, even the idea of war fought 'for' something is only barely applicable. War of this type merges with policy, becomes policy, is policy".[362] Subsequently, van Creveld warns, "much of present day military power is simply irrelevant as an instrument for extending or defending political interest over much of the globe".[363]

War Amongst the People

These enduring types of conflict, and the problems the West is currently encountering in operations in Africa, the Middle East and Central Asia, have also sparked an academic interest in the dynamics at play within, and the continuing role of the traditional foundations of communities, such as clans, tribes, ethnic and religious groups, and in patterns of criminal gangs and drug cartels. It has also rekindled the interest in the cultural aspects of local conflicts, the role of ideology, ideas, myths, and dogmas, and the contrast between modernist and traditional worldviews. It reached policy level in the *EU Security Strategy* of December 2004, which recognizes that such traditional groups and networks succeed in undermining local state authority and control, and resist the efforts of external parties, such as Western nations, to help create viable nation states that might contribute to stabilizing a region.[364] Indeed, black holes in the fabric

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361 Ralph Peters, "The New Warrior Class", *Parameters,* summer (1994): 16. See also his book *Fighting for the Future* (Mechanicsburg, PA: Stackpole Books, 1999).

362 van Creveld, *The Transformation of War*, pp. 142–43.

363 Ibid., p. 27.

364 Just to get a flavour of this research interest, see John Arquilla and David Ronfeld, eds, *Networks and Netwars, The Future of Terror, Crime and Militancy* (Santa Monica: RAND , 2001); Michael Ignatieff, *Blood and Belonging* (London: Vintage, 1994); and Robert Bunker, ed., *Non-State Threats and Future Wars* (London: Frank Cass, 2003); Brandan Wilson, "Tribal Tendencies, Global Realities: Islamic Group Dynamics in the Modern World", Center for Contemporary Conflict, Naval Postgraduate School, Monterey, 2 June , 2003; David Gompert, *Heads We Win, The Cognitive Side of Counterinsurgency* (Santa Monica: RAND, 2007); or the studies by Jessica Stern, *Terror in the name of God* (New York: Ecco, 2003); Marc Sageman, *Understanding Terror Networks* (Philadelphia: University of Pennsylvania Press, 2004); and Mark Juergensmeyer, *Terror in the Mind of God, The Global Rise of Religious Violence* (Berkeley: University of California Press, 2001).

of the international system define areas where the idea of the nation state has not replaced and eradicated the old ties of blood and belonging, and where sources of conflict and instability reside.[365] Ralph Peters sums it up: the primitive endures, and while we may be unbeatable on the battlefield, that battlefield is of declining relevance.[366] General Sir Rupert Smith – in only a slightly less ominous tone – in turn calls these conflicts *war amongst the people,* and told UK Prime Minister Tony Blair it is nothing less than a radical shift in the paradigm of war. The essential difference is that military force is no longer used to decide the political dispute, but rather to create a condition in which a strategic result is achieved. We are in a world of continual confrontations and conflicts in which military acts support the achievement of the desired outcome by other means. The problem is, he noted, that Western states are forced to engage in these *wars amongst the people*, in which our opponents, those formless non-state actors, appear to understand the utility of force better than we do.[367]

Strong Credentials

Clearly, 4GW authors were not, and are not, alone in seeing new and disturbing landmarks arising that increasingly define the strategic landscape, and their work echoes other studies, lending it credence. Bill Lind, for instance, one of the original authors of 4GW, focuses on the decline of the nation state as a prime driver for change in the nature of war. In his view 4GW is defined by the loss of the state's monopoly on war and on the first loyalty of its citizens, and by the rise of non-state entities that command people's primary loyalty and that wage war. In addition to supra-governmental agencies that chip away at the sovereignty of the nation state such as the UN, the World Bank, the EU, these entities may be gangs, religions, races and ethnic groups within races, localities, tribes, business enterprises, ideologies, in almost limitless variety. Lind expects – and already discerns – a return to a world of cultures, not merely states, in conflict. Similarly, Hammes' work, based on studies of insurgencies, civil wars and guerrilla warfare, also bears clear marks of this school of thought, describing 4GW as an "evolved form of insurgency".[368] Compared to the debate of the 1990s, however, 4GW papers add a level of urgency to these problematic phenomena.

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365 For an exploration of the black holes concept, see Rem Korteweg and David Ehrhardt, *Terrorist Black Holes, A Study into Terrorists Sanctuaries and Governmental Weakness*, CCSS Report (The Hague: CCSS, November 2005).

366 Ralph Peters, *Fighting for the Future* (Mechanicsburg: Stackpole Books, 1999), p. 171.

367 Sir Rupert Smith and Ilana Bet-El, "The Utility of Force", presentation to the prime minister, *10 Downing Street* (online); and Sir Rupert Smith, *The Utility of Force, The Art of War in the Modern World* (New York: Knopf, 2005).

368 This section draws on Thomas X. Hammes own synopsis in "War Evolves into the Fourth Generation", *Contemporary Security Policy*, vol. 26, no. 2, August (2005): 190.

TAKE THREE: 4GW AS AN EVOLVED INSURGENCY
Catalysts of Change

4GW papers tell a tale of continuity combined with a tale of change. As John Robb nicely points out, many of the methods used in 4GW are not new and have a robust historical precedent. However, there are important differences in how it is applied today.[369] While painting a very worrisome picture, the previous studies could still be regarded as dealing with conflicts that involved the West only if it chose to do so; they were wars of choice, and not of necessity, as Lawrence Freedman so finely put it.[370] Not so with 4GW. In contrast to the era of de-colonization or the ethnic conflicts in the Balkans, both developments – the decline of the state and the rise of alternative, often cultural, primary loyalties – manifest themselves not only "over there," but in America and other Western states.[371] Hammes argues that insurgency has evolved from Mao to Hamas in the sense that insurgents have acquired the ability, when faced with an external party that is involved, to tailor specific aggressive actions that play on the national will of that far "real enemy". They developed the ability to take the political war to their distant enemy's homeland and destroy his will to continue the struggle. Several interlocking factors contribute to this increased strategic reach of empowered groups, and lend 4GW its essentially subversive and corrosive character:

• **Global:** modern technologies and economic integration enable global operations.

• **Pervasive:** the decline of nation state warfare has forced all open conflict into the 4GW mold.

• **Granularity:** extremely small viable groups and a variety of reasons for conflict.

• **Vulnerability**: Western societies and economies are increasingly open and vulnerable.

• **Technology**: new technologies have dramatically increased the productivity of small groups of 4GW warriors.

• **Media:** global media saturation makes possible an incredible level of manipulation.

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369 See John Robb, *Global Guerillas*, internet blog (online 2 Apr 2007).
370 See for instance Lawrence Freedman, "Iraq, Liberal Wars and Illiberal Containment", *Survival,* vol. 48, no.4, winter (2006): 52, in which he repeats this distinction.
371 This section draws on William Lind, Maj. John Schmitt and Col Gary Wilson, "Fourth Generation Warfare: Another Look", *Marine Corps Gazette*, December (1994): 34–37; William Lind, "Understanding Fourth Generation War", *Military Review*, September–October (2004); and Thomas X. Hammes, "War Evolves into the Fourth Generation", *Contemporary Security Policy*, vol. 26, no. 2, August (2005): 189–221; and *The Sling and the Stone* (St.Paul: Zenith Press, 2004).

- **Networked:** new organizational types made possible by improvements in technology are much better at learning, surviving, and acting.
- **Ideology:** ethnic and religious ideologies are increasingly militant, directly targeting Western core values, and succeeding in attracting specific groups of young people in Western nations.

Globalization has made access to Western countries much easier. The increasing ease of access of media to international events, the enhanced transparency of global developments and incidents, the influence of the media in actually shaping policy, and the proliferation of consumer telecommunications has made it much easier for subversive groups to access Western countries, to form networks, to disseminate lessons learned and instruction, to recruit, and/or to spread their messages. With the easy access to technology, widely available common chemicals to produce weapons, and with the ease of travel, the entry costs for waging 4GW in and against open societies have been dramatically lowered. It fuels the rise of radical ideologies, jihadism in particular, attracting a growing crowd among Western, Muslim youths.[372] In addition, criminal groups, reactionary groups, radical ideologists, and opportunistic groups are increasingly blending in hybrids. As Hammes recently noted, the sad truth is that there is a truly alarming variety of armed groups active in the world today.

The Palestinian Intifada is seen as a worrisome example of these trends. Using networks abroad as well as at home, the Palestinian Intifada played directly to the domestic political process of its enemy. It evoked international support for the Palestinian people, in part by inviting Israeli military overreaction and displaying the results of attacks on civilians in international media, or by painting itself in the role of David – a kid armed with a slingshot confronting tanks – and Israel as the oppressor and occupier. They successfully marketed themselves as the victim, thereby discrediting the Israelis. Meanwhile, they made it clear that the fighting would only stop when the Israelis left the occupied territories. With such questionable moral underpinning, parents in Israel started to wonder whether their uniformed sons and daughters should be involved in this risky effort.

The message is clear: 4GW can hold its own against advanced military powers, and only unconventional war works against established powers. War has moved beyond high-technology maneuver war. It shifted from an industrial age focus on the destruction of the enemy's armed forces to an information age focus on changing the minds of the enemy's political decision makers. 4GW is

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372 For a detailed discussion of the role of ideology in recruiting, see for instance Rohan Gunaratna, "Ideology in terrorism and counter terrorism", in *The Ideological War on Terror*, eds Anne Aldis and Graeme Herd (London: Routledge, 2007).

now ubiquitous, and we, the West, find ourselves increasingly under siege, no longer the world's master, merely one contender among many, and sinking as others rise. And the method will spread, we are told. Most recent 4GW literature points at radical Islamist groups as the most immediate challenge, expanding outward as they do in every direction from their traditional heartland, including into Europe and the US. This also includes al-Qaeda and other extreme Islamists fighting today's insurgencies. Some have pointed at Hezbollah's successes against Israel in the conflict during the summer of 2006, or the international furore over the Danish cartoons and the murder of Theo van Gogh, the Dutch filmmaker. The resurgence of the Taliban in Afghanistan, this time fighting NATO troops, is also regarded as indicative of 4GW. The dire warning is that many countries will evolve 4GW on their soil, in fact, 9/11 brought the changing nature into our living rooms, it is asserted.

The Dynamics of 4GW

4GW warriors defeat the previous generation – maneuver warfare – by making use of superior political will employed over time. Instead of attempting to win by defeating the enemy's military forces, 4GW insurgents use all available networks – political, economic, social and military – to convince the enemy's political decision makers that their strategic goals are either unachievable or too costly for the perceived benefit. They combine guerrilla tactics or civil disobedience with the soft networks of social, cultural and economic ties, disinformation campaigns and innovative political activity to directly attack the enemy's political will. 4GW aims to paralyze the target state from within.

Following the dynamic laid out by Boyd, 4GW focuses on the moral level, where it works to convince all parties, neutrals as well as belligerents, that the cause for which a fourth generation entity is fighting is morally superior. It turns its state enemies inwards against themselves on the moral level, making the political calculations of the mental level irrelevant. Politically it involves transnational, national and sub national organizations and networks to convey its message to the target audiences. They see themselves not as military organizations but as webs, and are unified by ideas. Strategically it focuses on breaking the will of decision makers. It uses different pathways to deliver different messages for different target audiences. The message serves three purposes: to break the enemy's will; to maintain the will of its own people; and to ensure neutrals remain neutral or provide tacit support to the cause. Operationally it delivers those messages in a variety of ways from high-impact, high profile direct military actions to indirect economic attacks such as those designed to drive up the price of oil, or assassinations of specific government and company officials.

Tactically, 4GW forces avoid direct confrontation if possible, while seeking maximum impact. They use materials present in the society under at-

tack, be it industrial chemicals or fertilizers. 4GW warriors use standard guerrilla and terrorism tactics of small, highly manoeuvrable agile forces operating in a dispersed, autonomous way, their actions informed, inspired, glued, and gaining coherence by shared programs, ideals and hatreds. Witness the indiscriminate use of improvised explosive devices (IEDs) and suicide bombers, 4GW opponents will deliberately not sign up to the Geneva conventions and use whatever means are available in a theater. There is a blurring of the distinction of peace and war and of the distinction between civilian and military. There will be no definable battlefields or fronts, instead the battlefield is highly dispersed and includes the whole of society. Terrorists use a free society's freedom and openness against it. Finally, 4GW warriors plan for long wars – decades rather than months or years. It is, as Hammes notes, the antithesis of the high technology, short war the Pentagon is planning to fight.

Countering 4GW

How does one cope with 4GW? Because it is organized to ensure political rather than military success, 4GW is difficult to defeat, so Hammes warns us. No longer is defense only about stopping foreign enemies overseas. Some clues for dealing with 4GW are provided though. First, when getting involved in a 4GW fight, we should be planning for a decades-long commitment. This is considered perhaps the most important characteristic of 4GW. Second, we must integrate all elements of our national power, which also requires a plan, coordinated among the nation's agencies, not for winning battles, but for winning the war. It also requires a proper grand strategy that offers an appealing vision to the disenchanted we encounter in the world. America, and the West in general, must address the sources of the anti-American, anti-Western rage sweeping the post-colonial world as well as poverty and violations of human rights which are the raw material upon which 4GW feeds. Waging 4GW also calls for building a genuine interagency network, and doing away with 19th century bureaucracies. As 4GW is mostly about perception, public opinion, culture and the moral dimension, a high degree of local intelligence and cultural sensitivity is required within these networks, as well as a focus on languages, history, internal and international relationships. Interagency personnel must be deployed overseas along with the military for long periods. When deployed, they need to operate as interagency elements down to the tactical level, abandoning stove-pipes between organizations. This should ensure unity of effort among the range of international organizations, NGOs, and allies active in the theater.

Looking at the current Iraqi insurgency, three authors note that troops need to be able to combine and shift between peace-keeping, counterguerrilla and high intensity combat operations (the famous "Three Block War" model of the US Marines Corps). De-emphasising kinetic actions, they argue that am-

munition in these situations is not bullets, but rather money, food, medicine, education, fuel, employment, recognition and respect. Following Lind, they emphasize deescalation and stress the criticality of media relations and information operations to shape outside perception. Combined, such measures are aimed at draining support away from insurgents and isolating them.[373]

Based on this analysis, 4GW authors propose a distinct agenda for the US military, and in that they are not unlike other theorists that have developed a theory – or argument – to promote a specific agenda, such as Mitchell or Liddell Hart. Lind et. al. warn that the US military has still not discarded the attritionist mindset, except for the US Marines Corps perhaps. Second, they see a danger in the continued refusal of the services to focus training, doctrine and equipment on the sort of conflicts that 4GW describes, and that are expected to be the dominant challenge US forces will face. Pointing their arrows at the high-tech oriented transformation initiative launched by the Pentagon, that once again is focused on conventional warfare, 4GW authors emphasize the importance of non-technological innovation, such as increasing adaptability, leaning, operating in autonomous small groups, like the special forces are accustomed to. Only a low-tech counterinsurgency approach such as the one ongoing in Afghanistan, may be expected to achieve positive outcomes, after a long while, and improve American security against 4GW warriors.

5GW, the Empowered Individual and Open Source Warfare

4GW is not the end stage. We may regard each generation of warfare as an enhanced ability to drive "deeper" into the core of an enemy system. From that perspective, 4GW in turn may well evolve into a fifth generation. Already some analysts point at the increasing use of easy to come by chemical toxic agents such as resin or anthrax by "super-empowered individuals" or small groups as just such a development, again promising to make current Western forces structures and defense policies irrelevant.[374] The most recent label given to this phenomenon is "Open Source Warfare". As John Robb asserts in *Brave New War*, war in the twenty-first century will be very different from what we've come to expect. Terrorism and guerrilla warfare are rapidly evolving to allow non-state networks to challenge the structure and order of nation states. It is a change on a par with the rise of the internet and China, and will dramatically change how

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373 See Wilson, Wilcox and Richards "Fourth Generation Warfare …"

374 See for instance Robb, *Global Guerillas*; or Thomas X. Hammes, "War Evolves into the Fourth Generation", *Contemporary Security Policy*, vol. 26, no. 2, August (2005): 219–20. This section draws in particular on John Robb, *Brave New World, The Next Stage of Terrorism And The End of Globalization* (New York: John Wiley & Sons, 2007). For very similar observations see also Thomas X. Hammes, "Fourth Generation Warfare Evolves, Fifth Emerges", *Military Review*, May–June (2007): 14–23.

we will view security. The same technology that has enabled globalization also allows terrorists, criminals and violent ideologues to join forces against larger adversaries with relative ease and to carry out small, inexpensive actions – like sabotaging an oil pipeline – that will generate a huge return. Robb shows how taking steps to combat the shutdown of the world's oil, high-tech and financial markets could cost us the thing we have come to value the most – worldwide economic and cultural integration. For instance, during the summer of 2004, a small group of Iraqi insurgents blew up a southern section of the Iraqi oil pipeline infrastructure. This attack cost an estimated $2,000 to produce, and no attackers were caught, while the explosion cost Iraq $500 million in lost oil exports – a rate of return 250,000 times the cost of the attack.

This shift from state-against-state conflicts to wars against small, ad hoc bands of like-minded insurgents will lead to a world with as many tiny armies as there are causes to fight for. Our new enemies are looking for gaps in vital systems where a small, cheap action will generate a huge return. This new brand of open-source warfare enables insurgents to coordinate attacks, swarm on targets, and adapt rapidly to changes in their enemy's tactics, all at minimal cost and risk. This evolutionary leap in the methods of warfare makes it possible for extremely small non-state groups to fight states and possibly win on a regular basis. The use of "systems disruption" as a method of strategic warfare gives rise to a nightmare scenario in which any nation – including the United States – can be driven to bankruptcy by an enemy it cannot compete with economically. It is being exported around the world, from Pakistan to Nigeria to Mexico, creating a new class of insurgents Robb calls "global guerrillas". We are staring at a future where defeat is not experienced all at once but as an inevitable withering away of military, economic, and political power through wasting conflicts with minor foes, Robb asserts. It is part of a trend in the process of putting ever more powerful technological tools and the knowledge of how to use them into an ever-increasing number of hands, a theme shared by many esteemed futurists such as Ray Kurtzweil, John Smart and a chief scientist of NASA, John Bushnell. The new granular level, the realm of super-empowered groups is where the seeds of epochal conflict now reside. The rise of malicious "smart mobs" is the downside of Friedman's flattening world.[375]

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375 See for instance Ray Kurtzweil, *The Singularity Is Near* (London: Viking, 2005); Damien Broderick, *Spike, How Our Lives Are Being Transformed By Rapidly Advancing Technologies* (New York: Forge, 2001); and Thomas Friedman, *The World Is Flat* (New York: Farrar, Straus and Giraux, 2005). See Howard Rheingold, *Smart Mobs, The Next Social Revolution* (Cambridge, MA: Basic Books, 2003) for the social implications, and in particular chapter 7, for some examples of the political power that such groups may accrue.

TAKE FOUR: CRITIQUE

Overblown

A lot of critique has justifiably been put on paper recently in particular in response to the publication of *The Sling and the Stone*.[376] First, reading 4GW literature one gains an apocalyptic perspective, and a sense of doom for conventional forces, the nation state if not Western civilization. What the authors have in common across their individual papers, is a suggestion of a world in perpetual war and a drawn out conflict with al-Qaeda and similar extremist ideologists. It paints a picture in which Western states are under asymmetric attack and the constant threat of terror attacks and media manipulation while conducting bloody, drawn-out counterinsurgency operations such as those ongoing in Iraq. But, in the words of John Mueller, the threat of terrorism, a threat to which 4GW often refers, is overblown.[377] As James Wirtz, Colin Gray, James Evans, Edward Luttwak and John Ferris remark in concert, Hammes credits 4GW warriors with universal and permanent superiority over more conventional opponents, he overestimates their military and political strength, and pays insufficient attention to the problems of converting battlefield accomplishments into political success. 4GW warriors are not unstoppable. Terrorism and guerrillas hardly ever succeed, they actually lose most of their wars – the damage they inflict is a loss for the victims, not a gain for the perpetrators. Indeed, conventional Western military power is still hugely successful, precisely because it deters certain nation states and forces potential opponents into adopting modes of warfare that pose a relatively low level of risk. In addition, if we cannot win abroad in an insurgency, why bother if only peripheral interests are involved? Our weaknesses there may be real but irrelevant. Interstate wars, however infrequently they may occur, are much more important, having a significantly greater impact on the balance of power. Indeed, we must contextualize the threat in the wider international system and not fall victim to the "threat of the week" phenomenon.

Flawed History

Second, the history is flawed, in fact it is ahistorical. Evans regards 4GW as an elegant irrelevance based on polemic rather than paradigm, on mantra rather than method. Hammes attempts to advance a general theory of war for the 21st Century but his linear sequence of generations is historically incorrect: develop-

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376   This section draws together the critiques of James Wirtz, John Ferris, Edward Luttwak, Antulio Echevarria II, Michael Evans and Rod Thornton that were published in *Contemporary Security Policy*, vol. 26, no. 2, August (2005). In addition it draws on Antulio Echevarria II, *Fourth Generation Warfare And Other Myths* (Carlisle: Strategic Studies Institute, 2005); and Colin Gray, *Another Bloody Century* (London: Weidenfeld & Nicholson, 2005), in particular chapter six.

377   John Mueller, *Overblown* (New York: The Free Press, 2006).

ments often run parallel, are uneven in character, allowing for no neat catego-
rization. Echevaria notes that 4GW is based on a mythical interpretation of the
so-called Westphalian system and the fallacious ideas of "non-trinitarian war"
which is founded on a seriously flawed reading of Clausewitz's *On War*, the
book – by the way – that made clear to anyone that war, is and will always be
about the attempt to change the political will of one's opponent. With Douhet
in mind, who argued for terror bombing of civilian populations to coerce the
opponent's government, arguably Hammes is indeed merely stating a truism.

Nothing New

Third, there is hardly anything new under the sun. There have been and always
will be clashes of warforms. As Rod Thornton points out, 4GW is just another
term for dealing with insurgencies. The insurgency in Iraq, advanced as another
manifestation of 4GW, is actually nothing more than the normal response to
be expected when one country invades another. The fact that different and op-
posing factions form a coalition against the invader also has many historical
precedents. Asymmetric tactics were also always the hallmark of insurgents and
guerrillas. This includes the targeting of important industries or facilities and
personnel of NGOs such as the UN. Gandhi is an example of the strategic use of
non-violent actors, not dissimilar to employing crowds of women and children.
Violence reaching us at home was also not uncommon, at least in Europe, in
the past three decades when groups such as the Red Army Faction and the IRA
struck terror in the public hearts. In short : *plus ça change, plus c'est la même
chose*.

Conceptually Flawed

Fourth, and related to the previous observation, conceptually the threat is ad-
dressed in a flawed manner. 4GW is guilty of trying to create too much coher-
ence among disparate events, incidents, localized developments and factions.
Most criminal, terrorist and insurgent groups are actually very local in their
greed, grievances and activities and only use the "global insurgency" as a veneer
to gain local traction, wider attraction and legitimacy. Their strategic mobility
and aspirations, and the expectation that such groups may all cohere against
Western states, may well be exaggerated. In addition, 4GW seems to lean heav-
ily on case studies such as Vietnam, Iraq and the IDF-Palestine conflict and
extrapolate from that to Western states that are in fact not nearly so proximate
to areas of instability and are also in contrast quite resilient. There is an obvious
danger in that. What applies in Iraq – hardly a modern, established or stable
state – may not apply in the US or Europe, nor is it immediately apparent what
the equivalent actors – the terrorist-criminal symbiosis of John Robb – are to the

various Sunni and Shiite rogues perpetrating the daily atrocities in the streets of Baghdad or the gangs in Columbia and Nigeria.

Too Much Warfighting

In 4GW there is also too much focus on the warfighting aspect of war. There is a military bias, with an overt agenda that aims to inspire changes in the current structure, capabilities and mind-set of US armed forces. Meanwhile there is insufficient attention to the political aspects of insurgency. 4GW is not war neither is counterinsurgency. The problems 4GW point at require a different vocabulary, approaches and psychologies. When it threatens to hit our home countries, it is a crime, and therefore primarily a job for international security and justice departments, policy forces and other crime-fighting entities. When engaging a 4GW insurgency it must be managed away; it will not be "won". We should not look at insurgencies through the prism of warfare. To be sure, Hammes does sketch out briefly, and in contours only, the need for an interagency approach. However, 4GW literature is rather short on policy recommendations. There is no guidance to how to actually make coherence among different departments and organizations. What is also evident is the merits of the rhetorical question: if neither the heart of the problem, nor the solution is of a military nature, why harp on continuously about the requirement for reform of the US military?

Other Studies Are More Informative

Meanwhile, just a scant look at recent peace-keeping, terrorism, and counter-insurgency literature suffices to argue that existing literature is much more detailed and useful. 4GW merely points at problems we have encountered before. As with fighting 4GW, critical to peace-keeping proved the relationship between consent, force, endurance and impartiality.[378] If a peace operation uses too much force it risks losing its impartiality and crossing the consent divide into open conflict. At the same time, peacekeepers must be prepared to use minimum yet sufficient force to counter peace spoilers and induce consent for the operation to succeed. As in 4GW, another critical element is endurance. Often peace-keeping operations and their aftermaths involve and require lengthy commitments of the intervening powers to rebuild and democratize just look at the decade-long presence of European forces in the Balkan. These goals can furthermore only be attained if the strategy includes the elements of re-establishing security, empowering civil society, and strengthening democratic institutions, and coordinating

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378   This sections draws on my chapter "Venus calling; can NATO cope with 4GW?", in *The Right War?*, Terry Terriff and Aaron Karp (Routledge, forthcoming).

international efforts.[379] As one analyst admitted in a critical study, in the final analysis it is a stable, functional and legitimate state, supported by a healthy society, that is the best hedge against terrorism. Thus peace-building and, more narrowly, state-building efforts, have a very concrete and critical role to play in anti-terrorism and counter-insurgencies as they are mutually aimed at one of the most effective tools for combating terrorism – the functional and legitimate state.[380]

Legitimacy – objective or through created perception – is key indeed, Gow and Dandeker noted in several studies on the crises of the 1990s.[381] The local population, the home front of the Western politicians, and the wider media-informed world opinion must be convinced that the intervention is based on a legitimate mandate preferably from the UN, and that the prime reason for intervention is indeed in line with the justification offered by the mandate. Second, legitimacy refers to the (perception of the) actual conduct of the troops in the region. Legitimacy is a front. While gaining legal legitimacy is just a phase in the execution of the intervention, maintaining it is an arena for combat in which cultural biases, information operations, media play, propaganda, etc, are the main terrain features. One of the goals of the intervening party was always to create a process in which spoiler actions became increasingly de-legitimized in the eyes of the local population.

Recently, quite a few analysts have revisited counterinsurgency literature to glean old lessons for current problems and noted similar imperatives.[382] One needs to *fracture* the insurgent movement through military, psychological and political means; *delegitimize* it; *demoralize* it; *delink* it from internal and external supporters; and *deresource* it, Steven Metz argues, adding that one also needs the ability to sustain adequate efforts for years, perhaps even decades.[383]

379 See for instance Karin von Hippel, *Democracy by Force* (Cambridge: Cambridge University Press, 2000) chapter 6, or, more recently and building on lessons from Kosovo, Afghanistan and Iraq; Seth Jones, Jeremy Wilson, Andrew Rathmell and Jack Riley, *Establishing Law and Order After Conflict* (Santa Monica: RAND, 2005).

380 Ekaterina Stepanova, *Anti-Terrorism and Peace-building During and After Conflict* (Stockholm: SIPRI, June 2003), p. 49. See for similar comments from a US Special Forces practitioner, Lieutenant Colonel Eric Wendt, "Strategic Counterinsurgency Modeling", *Special Warfare*, September (2005): 2–13.

381 See for instance James Gow and Christopher Dandeker, "The Legitimation of Strategic Peacekeeping: Military Culture, the Defining Moment", in *Aspects of Peacekeeping*, eds D.S. Gordon and F.H. Toase (London: Frank Cass, 2001), pp. 181–198.

382 See for instance Kalev I. Sepp, "Best Practices in Counterinsurgency", *Military Review*, May–June (2005): 8–12; Robert Cassidy, "Back to Streets without Joy: Counterinsurgency Lessons from Vietnam and Other Small Wars", *Parameters*, summer (2004): 73–83.

383 Steven Metz and Raymond Hillen, *Insurgency and Counterinsurgency in the 21st Century: Reconceptualizing Threat and Response*, Strategic Studies Institute, Carlisle Barracks, November 2004. See for similar observations Hoffman, *Combating Al Qaeda* ... , p. 16.

Thus, by and large, history suggests that the imperatives of humanitarian intervention operations are compatible or overlapping with the demands of counterinsurgency, and therefore also "doing" 4GW. 4GW studies could have benefited from this expansive and growing literature.

4GW AS STRING THEORY

Exploring the "edges" of the Clausewitzian paradigm

The critique is well argued. 4GW papers betray a strong American conservative background and dissatisfaction with the prevailing policies of the Pentagon, lamenting the absence of a warrior spirit and cultural awareness and the addiction to fire power, technology and short wars. 4GW authors have a specific agenda, they are biased, and their arguments suffer from it. 4GW may indeed overemphasize unconventional war and may be too eager in relegating conventional forces to the dustbin. They may be too alarmist and pay too much attention to the threats and problems, and not to the solutions. On the other hand, there also seems to be a familiar element in this critique. The 4GW debate perhaps manifests a contrast between historians and futurists or between those who see continuity, or only gradual change and those who are struck by, and give more weight to disruptive innovation and radical change due to cumulating evolutions in "tipping point" fashion. Moreover, 4GW authors preempt some of the critiques in arguing that theirs is based on 70 years of trends, and that their generation's construct is just that, a vehicle for explanation.

Critique concerning the empirical validity of a theory in development must also be regarded with some caution. 4GW authors derive insights and empirical material from a wealth of studies. Moreover, any theorists who claimed to have grasped a new underlying pattern in war, or discerned the shape of future war have run into methodological problems and faced critiques concerning the scientific merits of their work. When Schelling and others put down thoughts on paper on the dynamics of strategic behaviour in the nuclear age, they were not on proven ground. Liddell Hart has suffered the same accusations of ahistoricity that has been leveled against 4GW. I sympathize with two highly regarded scientists. James B. Conant noted that "the history of science demonstrates beyond a doubt that the really revolutionary and significant advances come not from empiricism'. James Rosenau, in a similar vein, notes that 'to think theoretically one must be ready to appreciate and accept the need to sacrifice detailed descriptions for broad observations".[384]

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384 Cited in Abraham Kaplan, *The Conduct of Inquiry* (San Fransisco: Chandler Publishing, 1964), p. 303; James Rosenau, *The Scientific Study of Foreign Policy*, 2nd edition (New York: Nichols Pub. Co. 1980), p. 26.

Where does that leave us? Should we dismiss 4GW altogether as irrelevant, misguided, or even potentially dangerous, as Echevarria asserts? I tend not to agree with such views. First, I believe a postmodern health warning is in order regarding any theory or assessment that sees an absolute truth in a particular strategic idea, be it Clausewitzian or non-trinitarian or otherwise in perspective. So too with some claims of 4GW proponent that theirs is the new paradigm of warfare. Paradigms come, and very rarely go, but most often new ideas make manifest the inconsistencies of a paradigm, and areas that need exploration and refinement. They add, rather than replace. So it is I believe with 4GW. We need to do some expectations management when reading and assessing 4GW literature. I doubt it will reach the status of a level-1 strategic theory, but as a level-4 idea it may be very adequate and quite useful.

Second, the previous pages have highlighted that 4GW literature is part of a stream of ongoing academic research activities that try to discern patterns in the allegedly rapidly changing strategic environment, highlight new players and dynamics and derive the potential implications for security policy. Observations found in 4GW literature are also being discussed in other, often detailed studies. 4GW is part of a research program that explores the "edges" of the Clausewitzian paradigm. It is useful in putting the magnifying glass over the problematic meeting of Western versus non-Western conceptions and methods of war, of the instrumental rational use of force versus the existential experience of war. It balances the traditional military focus on the physical dimension and technology by pointing to the moral-mental dimensions of war, and other intangible factors such as organization and culture. It studies the role of non-state actors (including private military companies) in war and the dynamic of state versus non-state actors. It highlights the blurring of the boundaries: of war and crime, of combatant versus non-combatant, of war and peace, of internal versus external security. It homes in on the nexus of external war and domestic politics in times of increased transparency and media influence. It re-emphasizes the importance of counterinsurgency operations and comprehensive multi-agency approaches to contemporary strategic problems. 4GW authors were, and are, also on the mark in elevating ideas, ideologies, culture, and religions to the center stage of the strategic discourse. Finally, their work is valuable in studying the darker sides, and vulnerabilities, of the netted globalizing outsourcing information society and pointing out the emergence of empowered groups and individuals.

String theory

An analogy for assessing 4GW is string theory. In physics Newtonian laws still apply, but the accepted stature of Newton did not imply there was no room for Einstein's relativity theory or quantum mechanics. These ideas refined our perception of reality, and pointed to phenomena that the existing theories did not,

or could not account for. Highly complex, depicting a world with ten dimensions, string theory is the latest in the search for a more complete understanding of our reality. Conceived in the 1980s, string theory is still a work in progress. Posing new questions, it has inspired new and significant research. It has already revealed that the fabric of the cosmos may have many more dimensions than we perceive directly. But it has also invited the dismissive critique that a theory so removed from empirical testing lies in the realm of philosophy or theology, but not physics. On the positive side, it is accepted that it may not be the final theory, in fact, it may even turn out to be wrong in the end, but wrong in a very fruitful way.[385] Similarly, 4GW is inspiring discussion, debate, frustration, refinement of insights, assertions, conjectures and refutations: in short, like many other works that try to make sense of our uncertain and ever-changing environment, it helps us refine and adjust our orientation pattern and learn. Whatever one may think of 4GW, considering the wide audience, one cannot ignore the importance of it as an idea in strategic theory, and as an appealing – resonating – description of problems confronting Western military and political elites today. 4GW does not cover all aspects of the evolving strategic landscape, and perhaps 4GW is not the entirely academically correct analysis, but as an exercise in strategic thinking, creating a coherent synthesis out of a myriad of disparate trends and developments, it certainly has merits by making people aware of potential contours and dynamics of the future strategic landscape. Boyd would agree with the effort indeed.

385 Green, *The Fabric of the Cosmos*, p. 352.

BIBLIOGRAPHY

ABBOTT, ANDREW:
The System of Professions: An Essay in the Division of Expert Labor (Chicago: Chicago University, 1988).

ADAMS, KEITH:
"A Broader Conceptualization of Islam and Terrorism", *Joint Forces Quarterly*, issue 45, 2nd quarter (2007).

ALBERTS, DAVID S., JOHN J. GARTSKA, FREDERICK P. STEIN:
Network-Centric Warfare: Developing and Leveraging Information Superiority (Washington, D.C.: National Defense University, 1999).

ALGER, JOHN I.:
The Quest for Victory, The History of the Principles of War (Westport: Greenwood Press, 1982).

ALI, TAISIER M. AND ROBERT O. MATTHEWS, EDS:
Durable Peace: Challenges for Peacebuilding in Africa (Toronto: University of Toronto Press, 2004).

ANDREAS, PETER:
"Criminalising Consequences of Sanctions: Embargo Busting and Its Legacy", *International Studies Quarterly*, vol. 49, no. 23 (2005).
——"The Clandestine Political Economy of War and Peace in Bosnia", *International Studies Quarterly*, vol. 48, no. 3 (2004).

ARGYRIS, CHRIS AND DONALD A. SCHÖN:
Theory in Practice: Increasing professional effectiveness (London: Jossey-Bass, 1974).

ARON, RAYMOND:
Clausewitz, Philosopher of War (London: Routledge & Kegan Paul, 1983).

ARQUILLA, JOHN AND DAVID RONFELD, EDS:
Networks and Netwars, The Future of Terror, Crime and Militancy (Santa Monica: RAND, 2001).

BALLENTINE, KAREN:
"Reconsidering the Economic Dynamics of Armed Conflict", in *Greed and Grievance*, eds Karen Ballentine and Jake Sherman (Boulder, CO: Lynne Rienner, 2003).

BALLENTINE, KAREN AND JAKE SHERMAN, EDS:
The Political Economy of Armed Conflict: Beyond Greed and Grievance (Boulder, CO: Lynne Rienner, 2003).

BASSFORD, CHRISTOPHER:
"John Keegan and the Grand Tradition of Trashing Clausewitz", *War and History*, vol. 1, no. 3 (1994).

BAUMAN, ZYGMUNT:
Liquid Fear (Cambridge: Polity, 2006).

BECKETT, IAN F. W. AND JOHN PIMLOTT, EDS:
Armed Forces and Modern Counter-insurgency (New York: St. Martin's, 1985).

BERDAL, MATS:
"Beyond Greed and Grievance – and not too soon…", *Review of International Studies*, vol. 31 (2005).
—— "How 'New' are 'New Wars'? Global Economic Change and the Study of Civil War", *Global Governance*, vol. 9, no. 3 (2003).

BERDAL, MATS AND SPYROS ECONOMIDES:
United Nations Interventionism (Cambridge: CUP, 2007).

BERDAL, MATS AND DAVID KEEN:
"Violence and Economic Agendas in Civil Wars: Some Policy Implications", *Millennium: Journal of International Studies*, vol. 26, no. 3 (1997).

BERDAL, MATS AND DAVID MALONE, EDS:
Greed and Grievance: Economic Agendas in Civil War (Boulder, CO: Lynne Rienner, 2000).

BERGEN, PETER L.:
Holy War, Inc.: Inside the Secret World of Osama bin Laden (New York: Touchstone, 2002).

BETTS, RICHARD K.:
"Is strategy an Illusion?" *International Security*, vol. 25, no 2, Fall (2000).

BLACK, ANDREW:
"Al-Suri's Adaptation of fourth Generation Warfare Doctrine", *Terrorism Monitor*, vol. IV, issue 18, 21 September (2006).

BLACK, JEREMY:
Rethinking Military History (London: Routledge, 2004).

BLANCHE, ED:
"Al-Qaeda Recruitment," *Janes Intelligence Review*, 14 January 2002.

BLINN, JAMES:
The Aardwark is Ready for War (London: Anchor Press, 1997)

BOEMEKE, MANFRED F., ROGER CHICKERING, AND STIG FÖRSTER, EDS:
Anticipating Total War: The German and American Experiences, 1871–1914 (New York: Cambridge University, 1999).

BOND, BRIAN:
The Pursuit of Victory (Cambridge: Cambridge University Press, 1994).

BOOT, MAX:
—— *Savage Wars of Peace: Small Wars and the Rise of American Power* (New York: Basic Books, 2002).
"The New American Way of War," *Foreign Affairs*, vol. 82, no. 4 July/August (2003).

—— "The Struggle to Transform the Military," *Foreign Affairs*, vol. 84, no. 2 March/April (2005).

BOOTH, KEN:
"The Evolution of Strategic Thinking", in *Contemporary Strategy*, eds John Baylis, Booth, Ken, John Garnett and Phil Williams, vol. I, 2nd ed. (New York: Holmes & Meier, 1987).

BOOTHBY, DEREK:
"The Political Challenges of Administering Eastern Slavonia", *Global Governance*, vol. 10, no. 1 (2004).

BOYD, JOHN R.:
"A Discourse on Winning and Losing", Briefing, 1987, *Defense and the National Interest* (online 18 Apr 2007), URL: http://www.d-n-i.net/second_level/boyd_military.htm.
—— "Patterns Of Conflict", unpublished presentation.

BOYNE, WALTER J.:
Operation Iraqi Freedom (New York: Forge Books, 2003).

BRODERICK, DAMIEN:
Spike, How Our Lives Are Being Transformed By Rapidly Advancing Technologies (New York: Forge, 2001).

BRODIE, BERNARD:
War and Politics (New York: MacMillan, 1973).

BUNKER, ROBERT, ED.:
Non-State Threats and Future Wars (London: Frank Cass, 2003).

BURCKHARDT, JOHANNES:
„Die Friedlosigkeit der Frühen Neuzeit. Grundlegung einer Theorie der Bellizität in Europa" [The Absence of Peace in Early Moderen Europe. The Foundations of a Theory of Bellicism], *Zeitschrift für Historische Forschung*, vol. 24, no. 4 (1997).

BURKE, PETER:
A Social History of Knowledge From Gutenberg to Diderot (Cambridge: Polity Press, 2000).

CASSIDY, ROBERT:
"Back to Streets without Joy: Counterinsurgency Lessons from Vietnam and Other Small Wars", *Parameters*, summer (2004).

CHANDRASEKARAN, RAJIV:
Imperial Life in The Emerald City: inside Baghdad's Green Zone (London: Bloomsbury Publishing Plc, 2007).

CHENEY, DICK:
"A New American Way of War", remarks to the Heritage Foundation, 1 May 2003.

CHESTERMAN, SIMON:
"East Timor", in *United Nations Interventionism, 1991–2004*, ed. Mats Berdal and Spyros Economides (Cambridge: Cambridge University Press, 2007).

CHICKERING, ROGER AND STIG FÖRSTER, EDS:
Great War, Total War: Combat and Mobilization on the Western Front, 1914–1918 (New York: Cambridge University, 2000).

CHICKERING, ROGER AND STIG FÖRSTER, EDS:
The Shadows of Total War: Europe, East Asia, and the United States, 1919–1939 (New York: Cambridge University, 2003).

CHICKERING, ROGER, STIG FÖRSTER, AND BERND GREINER, EDS:
A World at Total War: Global Conflict and the Politics of Destruction, 1937–1945 (Cambridge: Cambridge University, 2005).

CHOPRA, JARAT AND TANJA HOHE:
"Participatory Peacebuilding", in *Building Sustainable Peace*, eds W. Andy Knight and Tom Keating (Edmonton: University of Alberta Press and Tokyo: United Nations University Press, 2004).

CIPOLLA, CARLO:
Vele e cannoni [Sails and cannons] (Bologna: Il Mulino, 1983).

CLAUDE, INIS L.:
"The New International Security Order: Changing Concepts", *Naval War College Review*, vol. XLVII, no. 1, Winter (1994).

CLAUSEWITZ, CARL VON:
On War, ed. Anatol Rapoport (Penguin: Harmondsworth, 1982).
—— *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, N.J.: Princeton University Press, 1976).
—— *On War* (Baltimore: Penguin Books, 1968).
—— *Principles of War* (1812, trans. 1942) (Mineola: Dover, 2003).
—— *Vom Kriege* (Berlin: Ferdinand Dümmler, 1832).
—— *Vom Kriege. Hinterlassenes Werk des Generals Carl von Clausewitz* [On War], 19th Ed., ed. Werner Hahlweg (Bonn: Ferd. Dümmlers, 1991).

COHEN, ELIOT A.:
Supreme Command, Soldier, Statesmen and Leadership in Wartime (New York: The Free Press, 2002).

COKER, CHRISTOPHER:
Humane Warfare (London: Routledge, 2001).
—— *Waging War Without Warriors, The Changing Culture of Military Conflict* (Boulder, Co.: Lynne Rienner, 2003).

COLIN GRAY:
Modern Strategy (Oxford: Oxford University Press, 1999).

CONFLICT, SECURITY AND DEVELOPMENT GROUP:
A Review of Peace Operations: A Case for Change (London: International Policy Institute King's College London, 2003).

COOK, NICK:
"Cause and Effect: Effects-Based Air Operations", *Jane's Defence Weekly*, 18 June 2003.

CORAM, ROBERT:
Boyd: The Fighter Pilot who Changed the Art of War (Boston: Little, Brown and Co., 2002).

CORBETT, JULIAN:
Some Principles of Maritime Strategy, ed. Eric Grove (Annapolis, MD, 1988; 1st edn. London, 1911).
—— *Some Principles of Maritime Strategy* (1911) (London: Longmans, Green and Co., 1972).

CORVISIER, ANDRÉ:
A Dictionary of Military History (Oxford: Blackwell, 1994).

COUSENS, ELIZABETH M.:
"Introduction", in *Peace-building as Politics: Cultivating Peace in Fragile Societies*, ed. Elizabeth M. Cousens and Chetan Kumar (Boulder, CO: Lynne Rienner Publishers, 2001).

CREVELD, MARTIN VAN:
The Art of War, War and Military Thought (London: Cassell, 2000).
—— *The Transformation of War* (New York: Macmillian, 1991).

DAASE, CHRISTOPHER:
Kleine Kriege – große Wirkung. Wie unkonventionelle Kriegführung die internationale Politik verändert [Small Wars with Major Consequences. How Unconventional Warfare is Changing International Politics] (Baden-Baden: Nomos, 1999).

DESCARTES, RENÉ:
Discourse on Method and Meditations (Mineola: Dover Publication, 2003).

DELBRÜCK, HANS:
Geschichte der Kriegskunst im Rahmen der politischen Geschichte [History of the Art of War in the Framework of Political History], vol. 4 (1920) (Walter de Gruyter Verlag: Berlin, 2000).

DEPTULA, DAVID A.:
Firing for Effect: Change in the Nature of Warfare (Arlington: Aerospace Education Foundation, 1995).
—— "Deptula's Reply to Van Riper's Concerns", *Inside the Navy*, 23 January 2006.

DIAMOND, LARRY:
"What Went Wrong in Iraq", *Foreign Affairs*, September/October (2004).

DINER, DAN:
Das Jahrhundert verstehen. Eine universalhistorische Deutung [Understanding the Century. A Universal-Historical Interpretation] (München: Luchterhand, 1999).

DODGE, TOBY:
"How Iraq Was lost", Review Essay, *Survival*, vol. 48, no. 4 (2006–07).
—— *Iraq's Future: The Aftermath of Regime Change*, Adelphi Paper 372 (London: IISS/Routledge, 2005).

DOYLE, MICHAEL, IAN JOHNSTONE AND ROBERT ORR:
"Introduction", in *Keeping the Peace: Multinational UN Operations in Cambodia and El Salvador*, eds M. Doyle, I. Johnstone and R. Orr (Cambridge: Cambridge University Press, 1997).

DREYFUS, HUBERT L. AND STUART E. DREYFUS:
"From Socrates to Expert Systems: The Limits of Calculative rationality", in *Philosophy and Technology II, Information Technology and Computers in Theory and Practice*, eds Carl Mitcham and Alois Huning (Dordrect: D. Reidel Publishing Company, 1986).
—— "From Socrates to Expert Systems: The Limits and dangers of Calculative rationality" (The Department of Philosophy, University of Berkely [online 13 April 2007]), URL: http://socrates.berkeley.edu/~hdreyfus/html/paper_socrates.html.

DUDNEY,, ROBERT S.:
"It's the Effect, Stupid", *Air Force Magazine*, vol. 89, no. 11, November (2006).

DWAN, RENATA AND SHARON WIHARTA:
"Multilateral peace missions: challenges of peace-building", *SIPRI Yearbook 2005* (Oxford: Oxford University Press, 2005).

ECHEVARRIA II, ANTULIO J.:
Clausewitz and Contemporary War (Oxford: Oxford University, 2007).
—— "Clausewitz's Center of Gravity: It's *Not* What We Thought", *Naval War College Review*, vol. 56, no. 1, Winter (2003).
—— *Fourth-Generation War and Other Myths* (Carlisle: Strategic Studies Institute, 2005).
—— "Principles of War or Principles of Battle?", in *Rethinking the Principles of War*, ed. Anthony D. McIvor (Annapolis: Naval Institute Press, 2005).
—— *Toward an American Way of War* (Carlisle, Pa.: US Army War College, Strategic Studies Institute, 2004).

ECONOMIDES, SPYROS:
"Kosovo", in *United Nations Interventionism, 1991–2004*, eds Mats Berdal and Spyros Economides (Cambridge: Cambridge University Press, 2007).

EDMUNDS, TIM:
"Shifting military roles in Europe", *International Affairs*, vol. 82, issue 6 (2006).

EHRENREICH, BARBARA:
Blood Rites: Origins and History of the Passions of War (London: Virago, 1997).

ELLIS, STEPHEN:
"Interpreting Violence: reflections on West African Wars". in *Violence*, ed. Neil L. Whitehead (Santa Fe: School of American Research Press/Oxford: James Currey, 2004).
—— "Liberia's Warlord Insurgency", in *African Guerrillas*, ed. Christopher Clapham (Oxford: James Currey, 1998).
—— "Violence and History: a response to Thandika Mkandawari", *Journal of Modern African Studies*, vol. 41, no. 3 (2003)

EUROPEAN PARLIAMENT:
EU and NATO: Co-operation or Competition (Policy Department, External Policies, October 2006).

FABER, PETER:
"The Evolution of Airpower Theory in the United States: From World War I to Colonel John Warden's *The Air Campaign*", in *Asymmetric Warfare*, ed. John Andreas Olsen, Militærteoretisk skriftserie, no. 4 (Oslo: The Royal Norwegian Air Force Academy, 2002).

FALLOWS, JAMES:
"Why Iraq Has No Army", *The Atlantic Monthly*, December (2005).

FERGUSON, NIAL:
War of the World: History's Age of Hatred (London: Alan Lane, 2006).

FRANKS, TOMMY WITH MALCOLM MCCONNELL:
American Soldier (New York: Regan Books, 2004).

FREEDMAN, LAWRENCE:
"Iraq, Liberal Wars and Illiberal Containment", *Survival,* vol. 48, no. 4, Winter (2006).

FRIEDMAN, THOMAS:
The Lexus and the Olive Tree (New York: Anchor, 2000).
—— *The World is Flat: A Brief History of the 21st Century* (New York: Farra, Strauss, Giroux, 2005).

FULLER, J.F.C.:
Foundations of the Science of War (Hutchinson and Co., 1925).
—— *The Conduct of War 1789–1961* (London: Methuen and Co., 1977).
—— *The Reformation of War* (London: Hutchinson, 1923).

GARNETT, JOHN C.:
Commonsense and the Theory of International Politics (London: MacMillan, 1984).

GAT, AZAR:
A History of Military Thought, From the Enlightenment to the Cold War (Oxford: Oxford University Press, 2001).
—— *The Origins of Military Thought from the Enlightenment to Clausewitz* (Oxford: Clarendon, 1989).

—— *War in Human Civilisation* (Oxford: Oxford University Press, 2006).

GEORGE, ALEXANDER:
Bridging the Gap, Theory and Practice in Foreign Policy (Washington, D.C.: United States Institute of Peace Press, 1993).

GERGES, FAWAZ A.:
The Far Enemy: Why Jihad Went Global (Cambridge: Cambridge University, 2005).

GIBSON, WILLIAM:
Virtual Light (New York : Bantam Books, 1993).

GILBERT, FELIX:
"Machiavelli: The Renaissance of the Art of War", in *Makers of Modern Strategy*, ed. Peter Paret (Oxford: Clarendon Press, 1986).

GOMPERT, DAVID:
Heads We Win, The Cognitive Side of Counterinsurgency (Santa Monica: RAND, 2007).

GORDON, MICHAEL R. AND GENERAL BERNARD E. TRAINOR:
The Generals' War. The inside story of the conflict in the Gulf (Boston: Little, Brown and Co., 1995).

GOULD, HAROLD AND FRANKLIN SPINNEY:
"Fourth Generation Warfare is Here", *Defense and the National Interest*, 15 October, 2001 (online 19 Apr 2007), URL: http://www.defense-and-society. org/fcs/gould_spinney_4GW.htm.

GOW, JAMES AND CHRISTOPHER DANDEKER:
"The Legitimation of Strategic Peacekeeping: Military Culture, the Defining Moment", in *Aspects of Peacekeeping*, eds D.S. Gordon and F.H. Toase (London: Frank Cass, 2001).

GRAY, COLIN:
Another Bloody Century (London: Weidenfeld & Nicholson, 2005).

GREEN, BRIAN:
The Fabric of the Cosmos (New York: Knopf, 2004).

GUNARATNA, ROHAN:
Inside Al Qaeda (London: C. Hurst, 2002).
—— ed.: *The Changing Face of Terrorism* (Singapore: Eastern Universities, 2004).

HABERMAS, JÜRGEN:
The Divided West (Cambridge: Polity, 2006).

HACKING, IAN:
The Taming of Chance (Cambridge: Cambridge University, 2002).

HAHLWEG, WERNER:
"Philosophie und Theorie bei Clausewitz", in *Freiheit ohne Krieg? Beiträge zur Strategie-Diskussion der Gegenwart im Spiegel der Theorien von Carl von*

Clausewitz [Freedom without War? Contributions to Contemporary Strategy Discussion in the Light of Carl von Clausewitz' Theories], ed. U. De Maizière (Bonn: Dümmler, 1980).

HAJJAR, SAMI G.:
Hizballah: Terrorism, National Liberation or Menace? (Strategic Studies Institute, U.S. Army War College, August 2002).

HALLION, RICHARD P.:
Storm over Iraq (Washington D.C.: Smithsonian Institution, 1992).

HAMMES, THOMAS X.:
"Fourth Generation Warfare Evolves, Fifth Emerges", *Military Review*, May-June (2007).
—— "4th-generation Warfare: Our enemies play to their strengths", *Armed Forces Journal*, November (2004).
—— "Insurgency: Modern Warfare Evolves into a Fourth Generation", *Strategic Forum*, no. 214, January (2005).
—— *The Sling and the Stone* (St.Paul: Zenith Press, 2004).
—— "War Evolves into the Fourth Generation", *Contemporary Security Policy*, vol. 26, no. 2, August (2005).

HANDEL, MICHAEL:
Masters of War: Classical Strategic Thought, 3rd ed. (London: Frank Cass, 2001).

HART, BASIL LIDDELL:
When Britain Goes to War (London: n.p., 1928).

HEUPEL, MONIKA AND BERND ZANGL:
„Von ‚alten' und ‚neuen' Kriegen – Zum Gestaltwandel kriegerischer Gewalt" [On "Old" and "New" Wars – the New Shape of Belligerency], *Politische Vierteljahresschrift*, vol. 45, no. 3 (2004).

HEUSER, BEATRICE:
Reading Clausewitz (London: Pimlico, 2002).

HOFFMAN, BRUCE:
Combating Al Qaeda and the Militant Islamic Threat, testimony presented to the House Armed Services Committee, February 16, 2006 (Santa Monica: RAND, 2006).
—— "Insurgency and Counterinsurgency in Iraq", *Studies in Conflict and Terrorism*, vol. 29, no. 2 (2006).

HOLSTI, KALEVI J.:
The State, War, and the State of War (Cambridge: Cambridge University Press, 1996).

HONDERICH, TED:
The Oxford Companion to Philosophy (Oxford: Oxford University Press, 2005).

HOWARD, MICHAEL ED.:
The Theory and Practice of War (1966) (Bloomington: Indiana University Press, 1975).

HURD, DOUGLAS:
The Arrow War: an Anglo-Chinese Confusion 1856–60 (London: Collins, 1967).

HURD, IAN:
"Legitimacy and Authority in International Politics", *International Organization*, vol. 53, no. 2, Spring (1999).

IGNATIEFF, MICHAEL:
Blood and Belonging (London: Vintage, 1994).
—— *The Warrior's Honor* (London: Vintage, 1999).
—— *The Warrior's Honor: Ethnic war and the Modern Conscience* (London: Chatto & Windus, 1998).

INTERNATIONAL CRISIS GROUP:
"Iraq: can local governance save central government?", Middle East Report, no. 33, 27 October 2007.

IRIYE, AKIRA:
"War as peace, peace as war", in *Experiencing the Twentieth Century*, Philip Windsor and Georges Nivat (Tokyo: University of Tokyo Press, 1985).

JACQUIN-BERDAL, DOMINIQUE:
"How New are Africa's 'New Wars'?: A Historical Sketch", unpublished paper, 2005.

JAMES, WILLIAM:
The Essential Readings, ed. Bruce W. Wilshire (Albany: State University of New York Press, 1984).

JANOWITZ, MORRIS:
The Professional Soldier. A Social and Political Portrait (Glencoe: The Free Press, 1960).

JOAS, HANS:
War and Modernity (Cambridge: Polity Press, 2003).

JOHNSON, DOUGLAS H.:
The Root Causes of Sudan's Civil Wars (Oxford: James Currey, 2003).

JOINT CHIEFS OF STAFF:
Joint Publication 3-0. Joint Operations, Washington, D.C., 17 September 2006.

JOMINI, ANTOINE HENRI DE:
The Art of War (1838) (London: Greenhill Books, 1992).

JONES, SETH, A. RATHMELL, J. WILSON AND K.J. RILEY:
Establishing Law and Order after Armed Conflict (Santa Monica, CA: Rand Corporation, 2005).

JONES, SETH, JEREMY WILSON, ANDREW RATHMELL AND JACK RILEY:
Establishing Law and Order After Conflict (Santa Monica: RAND, 2005).

JUERGENSMEYER, MARK:
Terror in the Mind of God, The Global Rise of Religious Violence (Berkeley: University of California Press, 2001).

KAHL, MARTIN AND ULRICH TEUSCH:
„Sind die ‚neuen Kriege' wirklich neu?" [Are the "new wars" really new?] *Leviathan*, vol. 32, no. 3 (2004).

KALDOR, MARY:
"Introduction", in *Global Insecurity,* ed. Mary Kaldor (London: Cassell/Pinter, 2000).
—— *New and Old Wars: Organized Violence in a Global Era* (Stanford: Stanford University Press, 1999).

KAPLAN, ABRAHAM:
The Conduct of Inquiry (San Fransisco: Chandler Publishing, 1964).

KAPLAN, ROBERT D.:
The Coming Anarchy (New York: Vintage, 2001).
—— "The Coming Anarchy", *Atlantic Monthly,* February (1994).

KARMARCK, ANDREW:
Economics for the C21st (London: Ashgate, 2001).

KEEGAN, JOHN:
A History of Warfare (New York: Alfred A. Knopf, 1993).
—— *The Mask of Command* (New York: Penguin, 1987).

KEEN, DAVID:
The Economic Functions of Violence in Civil Wars, Adelphi Paper 320 (Oxford: OUP/IISS, 1998).

KELLY, JUSTIN AND DAVID KILCULLEN:
"Chaos versus Predictability: A Critique of Effects-Based Operations", *Security Challenges*, vol. 2, no. 1, April (2006).

KIESEWETTER, JOHANN G. K.:
Grundriss einer Allgemeinen Logik nach Kantischen Grundsätzen zum Gebrauch für Vorlesungen [An Outline of General Logic on Kantian Principles for Use in Lectures], 2 vols., 3rd and 4th eds (Leipzig: H. A. Kochly, 1824–25).

KILCULLEN, DAVID:
"'Twenty-Eight Articles': Fundamentals of Company-level Counterinsurgency", *Military Review,* May-June (2006).

KISSINGER, HENRY:
Years of Upheaval (Boston: Little, Brown & Co., 1982).

KNÖBL, WOLFGANG:
„Krieg, ‚neue Kriege' und Terror: Sozialwissenschaftliche Analysen und ‚Deutungen' der aktuellen weltpolitischen Lage" [War, "New Wars" and Terror: Social Science Analyses and Interpretations of Contemporary Global Politics], *Soziologische Revue*, vol. 27 (2004).

KOBER, AVI:
"Nomology vs Historicism: Formative Factors in Modern Military Thought", *Defense Analysis,* vol. 10, no. 3 (1994).

KOLAKOWSKI, LESZEK:
"The Self-Poisoning of the Open Society", in *Modernity on Endless Trial* (Chicago: Chicago University Press, 1990).

KOONINGS, KEES AND DIRK KRUIJT, ED.:
Armed Actors: Organised Violence and State Failure in Latin America (London: Zed Books, 2004).

KORTEWEG, REM AND DAVID EHRHARDT:
Terrorist Black Holes, A Study into Terrorists Sanctuaries and Governmental Weakness, CCSS Report (The Hague: CCSS, November 2005).

KREPINEVICH, ANDREW:
Operation Iraqi Freedom – A First-Blush Assessment (Washington D.C.: Center for Strategic and Budgetary Assessments, 2003).

KUHN, THOMAS S.:
The Structure of Scientific Revolutions (1962) (Chicago: The University of Chicago Press, 1996).

KURTENBACH, SABINE AND PETER LOCK, EDS:
Kriege als (Über)Lebenswelten. Schattenglobalisierung, Kriegsökonomien und Inseln der Zivilität [Wars as Spheres of Life and Survival. Shadow Globalisation, War Economies and Islands of Civilization] (Bonn: Dietz Verlag, 2004).

KURTZWEIL, RAY:
The Singularity Is Near (London: Viking, 2005).

LAQUEUR, WALTER:
Guerilla Warfare: A Historical and Critical Study (Boulder: Westview, 1984).

LEWIS, IOAN M.:
A Modern History of the Somali,4th edition (Oxford: James Currey, 2002).
—— "Why the Warlords Won," *Times Literary Supplement*, 8 June 2001.

LIANG, QIAO AND WANG XIANGSUI:
Unrestricted Warfare (Beijing: People's Liberation Army, 1999).

LIEDMAN, SVEN-ERIC:
I skuggan av framtiden [In the shadow of the future] (1997) (Stockholm: Albert Bonniers Förlag, 1999).

LIND, WILLIAM:
"Understanding Fourth Generation War", *Military Review*, September–October (2004).

LIND, WILLIAM S., KEITH NIGHTENGALE, JOHN F. SCHMITT, JOSEPH W. SUTTON, GARY I. WILSON:
"The Changing Face of War: Into the Fourth Generation," *Marine Corps Gazette*, October (1989).

LITTLE, PETER D.:
Somalia: Economy without State (Oxford: James Currey, 2003).

LOCK, PETER:
„Ökonomien des Krieges. Ein lange vernachlässigtes Forschungsfeld von großer Bedeutung für die politische Praxis", in *Die Zukunft des Friedens. Eine Bilanz der Friedens- und Konfliktforschung*, eds Astrid Sahm et. al. (Wiesbaden: Westdeutscher Verlag, 2002).

LOCK-PULLAN, RICHARD:
US Intervention Policy and Army Innovation (London: Routledge, 2005).

LOSEE, JOHN:
A Historical Introduction to the Philosophy of Science, 4th ed. (Oxford: Oxford University Press, 2001).

LUTTWAK, EDWARD N.:
"Give War a Chance", *Foreign Affairs*, vol. 78, no. 4, July/August (1999).
—— "Lifting the Fog of War by Bill Owens with Ed Offley", book review, *New York Times Book Review*, 21 January 2001.
—— *Strategy, the Logic of War and Peace* (Cambridge, MA: Harvard University Press, 1987).

LYONS, TERENCE:
"The Role of Postsettlement Elections", in *Ending Civil War*, S. Stedman et al. (Boulder, CO: Lynne Rienner, 2002).

MACFARLANE, NEIL:
Intervention in Contemporary World Politics, Adelphi Paper 350 (Oxford: OUP for IISS, 2002).

MACGREGOR, DOUGLAS A.:
"Transformation and the Illusion of Change", *National Security Studies Quarterly*, Autumn (2000).

MACHIAVELLI, NICCOLÒ:
Discourses On Livy (Chicago: The University of Chicago Press, 1996).
—— *The Art of War* (New York: Da Capo Press, 1965).
—— *The Prince* (London: Penguin, 1995).

MALONE, DAVID AND SEBASTIAN EINSIEDEL:
"Haiti" in *United Nations Interventionism, 1991–2004*, eds Mats Berdal and Spyros Economides (Cambridge: Cambridge University Press, 2007).

MARCUSE, HERBERT:
One-Dimensional Man: Studies in the Ideology of Advanced Industrial Societies (Boston: Beacon Press, 1991).

MARRIAGE, ZOË:
"Flip-flop rebel, dollar soldier – Demobilisation in the Democratic Republic of Congo", paper prepared for research project on the Political Reintegration of

Armed Groups, CSD Programme at King's College London/Norwegian Ministry of Foreign Affairs, May 2006.

MARTIN, JAMES:
The Meaning of the Twenty First Century (New York: Riverhead Books, 2006).

MAYALL, JAMES:
"The Legacy of Colonialism", in *Making States Work: State Failure and the Crisis of Governance*, Simon Chesterman, Michael Ignatieff, Ramesh Thakur (Tokyo: United Nations University Press, 2005).
—— ed.: *The New Interventionism, 1991-94* (Cambridge: CUP, 1997).

MEARSHEIMER, JOHN:
The Tragedy of Great Power Politics (New York/London: W.W. Norton, 2001).

MENKHAUS, KEN:
"Governance without Government in Somali", *International Security*, vol. 31, no. 3 (2006/07).
—— *Somalia: State Collapse and the Threat of Terrorism*, Adelphi Paper 364 (Oxford: Oxford University Press, 2004).

MENZEL, ULRICH:
Paradoxien der neuen Weltordnung [The Paradoxes of the New World Order] (Frankfurt/M.: Suhrkamp Verlag KG, 2004).

MERTSALOV, A.N.:
"Jomini versus Clausewitz", in *Russia – War, Peace and Diplomacy*, eds Ljubica and Mark Erickson (London: Weidenfeld & Nicolson, 2004).

METZ, STEVEN AND RAYMOND HILLEN:
Insurgency and Counterinsurgency in the 21st Century: Reconceptualizing Threat and Response (Carlisle Barracks: Strategic Studies Institute, November 2004).

MISHAL, SHAUL AND AVRAHAM SELA:
The Palestinian Hamas: Vision, Violence, and Coexistence (New York: Columbia University, 2000).

MORAN, DANIEL:
"Strategic Theory and the History of War", in *Strategy in the Contemporary World. An Introduction to Strategic Studies*, Baylis, Wirtz, Cohen and Gray (Oxford: Oxford University Press, 2002).

MOSELEY, LIEUTENANT GENERAL T. MICHAEL:
Operation Iraqi Freedom – By the Numbers (USCENTAF, Assessment and Analysis Division, April 30, 2003).

MUELLER, JOHN:
Overblown (New York: The Free Press, 2006).

MÜNKLER, HERFRIED:
Der Wandel des Krieges. Von der Symmetrie zur Asymmetrie [The Changing Face of War. From Symmetry to Asymmetry] (Weilerswist: Velbrück, 2006).

—— *Empire. The Logic of World Domination from Acient Rome to the United States* (Cambridge: Polity Press, 2007).

—— *The New Wars* (Oxford: Polity, 2005).

—— *Über den Krieg. Stationen der Kriegsgeschichte im Spiegel ihrer theoretischen Reflexion* [On War. Stages in the History of Warfare as Reflected in Theory] (Weilerswist: Velbrück, 2002).

NATIONAL COUNTERTERRORISM CENTER:

A Chronology of Significant International Terrorism for 2004, Washington, D.C., April 27, 2005.

NATO:

Glossary of Terms and Definitions, AAP-6.

—— "NATO After Istanbul", NATO Public Diplomacy Division, n.d.

O'HEAR, ANTHONY:

Introduction to the Philosophy of Science (Oxford: Clarendon Press, 1989).

O'NEILL, BARD E.:

Insurgency and Terrorism: Inside Modern Revolutionary Warfare (Washington, D.C.: Brassey's, 1990)

OSINGA, FRANS:

"Een nieuwe totale oorlog als dialectisch moment" [A New Total War as a Dialectic Moment], *Vrede en Veiligheid*, vol. 30, no. 4 (2001).

—— *Science, Strategy and War, The Strategic Theory of John Boyd* (Abingdon: Routledge, 2006).

—— *Science, Strategy and War: The Strategic Theory of John Boyd* (Delft: Eburon, 2005).

—— "Venus calling; can NATO cope with 4GW", in *The Right War?*, Terry Terriff and Aaron Karp (Routledge, forthcoming).

PARET, PETER:

Clausewitz and the State: The Man, His Theories, and His Times (Princeton: Princeton University, 1985).

PARKER, GEOFFREY:

The Military Revolution. Military Innovation and the Rise of the West, 1500–1800 (Cambridge: Cambridge University Press, 1988).

PARKINSON, ROGER:

Clausewitz: A Biography (New York: Stein and Day, 1971).

PEPPER, SIMON AND NICHOLAS ADAMS:

Firearms and Fortifications. Military Architecture and Siege Warfare in Sixteenth-Century Siena (Chicago/London: University of Chicago Press, 1986).

PETERS, RALPH:

Fighting for the Future (Mechanicsburg, PA: Stackpole Books, 1999).

—— "The New Warrior Class", *Parameters*, Summer (1994).

POLANYI, KARL:
The Great Transformation [1944] (Boston: Beacon Press, 2001).

POWELL, COLIN WITH JOSEPH PERSICO:
My American Journey (New York: Random House, 1996; 1st edn 1995).

PRESSFIELD, STEVEN:
"It's the Tribes, Stupid" *Defense and the National Interest*, October 2006 (online), URL: http://www.d-n-i.net/fcs/pressfield_tribes.htm.

PUGH, MICHAEL AND NEIL COOPER WITH JONATHAN GOODHAND:
War Economies in a Regional Context (Boulder, CO: Lynne Rienner, 2003).

RADTKE, KATRIN AND KLAUS SCHLICHTE:
„Bewaffnete Gruppen und die moralische Ökonomie der Diaspora"[Armed Groups and the Moral Economy of the Diaspora], in *Transnationale Solidarität. Chancen und Grenzen* [Transnational Solidarity. Oportunities and limitations], eds Jens Beckert et. al. (Frankfurt/New York: Campus Verlag, 2004).

RAMADANI, SAMI:
"In Iraq, public anger is at last translating into unity", *Guardian*, 20 March 2007.

REDDING, ANDREW:
"Human Rights in Guatemala Since the Signing of the Peace Accords", report for U.S. Department of Justice, October 1992, World Policy Institute [New School (online 18 Apr 2007)], URL: www.worldpolicy.org/globalrights/ guatemala/1998-Guatemala.html#demobilize.

RHEINGOLD, HOWARD:
Smart Mobs, The Next Social Revolution (Cambridge, MA: Basic Books, 2003).

RICHARDS, CHET:
"Conflict in the Years Ahead" (February 2005 and February 2006), *Defense and National Interest* (online), URL: http://www.defense-and-society.org/ richards/conflict_in_the_years_ahead_v7.1.ppt.

RICHARDS, PAUL:
"New War: An Ethnographic Approach", in *No War No Peace: An Anthropology of Contemporary Armed Conflicts*, ed. Paul Richards (Athens: Ohio University Press/Oxford: James Currey, 2005).

RICKS, THOMAS E.:
Fiasco (London: Allen Lane, 2006).

RINGER, FRITZ:
Fields of Knowledge, French academic culture in comparative perspective 1890–1920 (Cambridge: Cambridge University Press, 1992).

ROBB, JOHN:
Brave New World, The Next Stage of Terrorism And The End of Globalization (New York: John Wiley & Sons, 2007).
—— *Global Guerillas*, internet blog (online 2 Apr 2007), URL: http://glo-balguerrillas.typepad.com/globalguerrillas.

ROBERTS, ADAM:
"Humanitarian Issues and Agencies as Triggers for International Military Actions", in *Civilians in War*, ed. Simon Chesterman (Boulder, CO: Lynne Rienner, 2001).
—— "Torture and Incompetence in the War on Terror", *Survival*, vol. 49, no. 1 (2007).

ROGERS, CLIFFORD J., ED.:
The Military Revolution Debate. Readings on the Military Transformation of Early Modern Europe (Boulder: Westview Press, 1995).

ROLF, BERTIL:
Militär kompetens, Traditioners förnyelse 1500–1940 [Military competence. The renewal of traditions 1500–1940] (Nora: Nya Doxa, 1998).

ROSENAU, JAMES:
The Scientific Study of Foreign Policy, 2nd edition (New York: Nichols Pub. Co. 1980).

ROTHENBERG, GUNTHER E.:
"Maurice of Nassau, Gustavus Adolphus, Raimondo Montecuccoli, and the 'Military revolution' of the Seventeenth Century", in *Makers of Modern Strategy*, ed. Peter Paret (Oxford: Clarendon Press, 1986).

ROTHFELS, HANS:
Carl von Clausewitz: Politik und Krieg [Carl von Clausewitz: Politics and War] (Berlin: Dümmler, 1920).

RUF, WERNER ED.:
Politische Ökonomie der Gewalt. Staatszerfall und die Privatisierung von Gewalt und Krieg [The Political Economy of Violence. The Dissolution of States and the Privatisation of Violence and War] (Opladen: Leske + Budrich, 2003).

RUFF, JULIUS R.:
Violence in Early Modern Europe, 1500–1800 (Cambridge: CUP, 2001).

RUMSFELD, DONALD H. AND TOMMY R. FRANKS:
"Summary of Lessons Learned", Prepared Testimony by SECDEF Donald H. Rumsfeld and GEN Tommy R. Franks, presented to the Senate Armed Services Committee, July 9, 2003.

RUSSETT, BRUCE AND HARVEY STARR:
World Politics, A Menu for Choice (San Fransico: Freeman, 1981).

SAGEMAN, MARC:
Understanding Terror Networks (Philadelphia: University of Pennsylvania Press, 2004).

SAIKAL, AMIN:
Modern Afghanistan: A History of Struggle and Survival (London: I.B. Tauris, 2006).

SAXE, MARSHAL MAURICE DE:

My Reveries on the Art of War in *Roots of Strategy*, ed. Thomas R. Phillips (Harrisburg: The Military Service Publishing Company, 1940).

—— *Reveries on the Art of War* (1732) (Harrisburg: The Telegraph Press, 1944).

SCHEUER, MICHAEL:

Imperial Hubris: Why the West is Losing the War on Terror (Washington, DC: Brassey's, 2004).

—— *Through Our Enemies' Eyes: Osama bin Laden, Radical Islam, and the Future of America, revised edition* (Washington D.C.: Potomac Books, 2006).

SCHREIBER, WOLFGANG:

„Die Kriege in der zweiten Hälfte des 20. Jahrhunderts und danach"; in *Das Kriegsgeschehen 2000*, eds Th. Rabehl and W. Schreiber (Wiesbaden: VS Verlag, 2001).

SCHWARZKOPF, H. NORMAN (WITH PETER PETRE):

It Doesn't Take a Hero (New York: Bantam Books, 1992).

SEPP, KALEV I.:

"Best Practices in Counterinsurgency", *Military Review*, May–June (2005).

SIEGELBERG, JENS:

Kapitalismus und Krieg. Eine Theorie des Krieges in der Weltgesellschaft [Capitalism and War. A Theory of War in Global Society] (Münster/Hamburg: Lit-Verlag, 1994).

SIPRI:

SIPRI Yearbook 2006 (Oxford: Oxford University Press, 2006).

SMITH JR, EDWARD A.:

"Effects-Based Operations", *Security Challenges*, vol. 2, no. 1, April (2006).

SMITH, HUGH:

On Clausewitz, A Study of Military and Political Ideas (New York: Palgrave, 2005).

SMITH, PAUL J.:

"Transnational Terrorism and the al Qaeda Model: Confronting New Realities," *Parameters*, vol. 32, no. 2, Summer (2002).

SMITH, SIR RUPERT:

The Utility of Force, The Art of War in the Modern World (New York: Knopf, 2005).

SMITH, SIR RUPERT AND ILANA BET-EL:

"The Utility of Force", presentation to the prime minister, *10 Downing Street* (online), URL: http://www.number-10.gov.uk/output/page10724.asp.

SNIDER, DON AND GAYLE L. WATKINS, EDS:

The Future of the Army Profession (New York: McGraw-Hill, 2002).

SPILLER, ROGER:

An Instinct for War: *Scenes From the Battlefields of History* (Cambridge: Harvard University Press, 2005).

STEPANOVA, EKATERINA:
Anti-Terrorism and Peace-building During and After Conflict (Stockholm: SIPRI, June 2003).

STERN, JESSICA:
Terror in the name of God (New York: Ecco, 2003).

STRACHAN, HEW:
"Making Strategy: Civil-Military relations after Iraq" *Survival*, vol. 48, no. 3 (2006).

SYNNOTT, HILARY:
"State Building in Southern Iraq", *Survival*, vol. 47, no. 2, Summer (2005).
—— *The Coalition Provisional Authority in Southern Iraq,* unpublished paper, 2005.

TRIPP, CHARLES:
A History of Iraq (Cambridge: CUP, 2000).
—— "After Saddam", *Survival*, Autumn (2002).
—— "Militas, Vigilantes, Death Squads", *London Review of Books*, 25 January (2007).

TROUILLOT, MICHEL-ROLPH:
Global transformations : anthropology and the modern world (New York/ Basingstoke: Palgrave Macmillan, 2003).

U.S. DEPARTMENT OF STATE:
Country Reports on Terrorism 2004, Office of Coordinator for Counterterrorism, Washington, D.C., April 2005.
—— *Patterns of Global Terrorism*, Washington, D.C., 2003.

UNITED NATIONS:
An Agenda for Peace, Report of the Secretary-General, a/47/277-S/24111, 17 June 1992.
—— Presidential Statement, S/PRST/2005/20.
—— Press Release SC/8395, Security Council 5187th Meeting, 26 May 2005.
—— *Report of the Panel on United Nations Peace Operations*, A/55/305, paragraph 13.
—— *Report of the Secretary-General on the Work of the Organization – 1998*, A/53/1.

UNITED NATIONS GENERAL ASSEMBLY:
2005 World Summit Outcome, A/Res/60/1, 24 October 2005 (online 30 May 2007), URL: http://unpan1.un.org/intradoc/groups/public/documents/UN/ UNPAN021752.pdf

VAN CREVELD, MARTIN:
The Rise and Decline of the State (Cambridge: Cambridge University Press, 1999).
—— *The Transformation of War* (New York: The Free Press, 1991).

VAN RIPER, PAUL K.:
Planning for and Applying Military Force: An Examination of Terms (Washington D.C.: Hicks and Associates, 2005).

VIRILIO, PAUL:
Negative Horizon: An Essay in Dromoscopy (London: Continuum, 2005).

VON HIPPEL, KARIN:
Democracy by Force (Cambridge: Cambridge University Press, 2000).

VON TROTHA, TRUTZ AND GEORG KLUTE:
„Politik und Gewalt oder Beobachtungen und Anmerkungen über das ‚Kalaschsyndrom'" [Politics and force or observations and remarks of the "Kalash-syndrom"], in *Der Begriff des Politischen*, eds Armin Nassehi and Marcus Schroer (Baden-Baden: Nomos, 2003).

WALZER, MICHAEL:
Just and Unjust Wars (New York: Basic Books, 1992).

WATSON, HUGH SETON:
Neither War nor Peace: The Struggle for Power in Post-War World (London: Methuen & Co., 1960).

WEBER, MAX:
Der Sozialismus [Socialism] (Weinheim: Beltz Athenäum Verlag, 1995).

WEIGHLEY, RUSSELL:
The Age of Battle: The Quest for Decisive Warfare from Breitenfeld to Waterloo (London: Pimlico, 1991).
—— *The American Way of War: A History of U.S. Military Strategy and Policy* (Bloomington, IN: Indiana University, 1973).

WENDT, LIEUTENANT COLONEL ERIC:
"Strategic Counterinsurgency Modeling", *Special Warfare*, September (2005).

WHEELER, NICK:
Saving Strangers: Humanitarian Intervention in International Society (Oxford: OUP, 2003).

WHITEHEAD, NEIL L.:
"Terrorism, Ethnic Conflict and The Culture of Violence", *Communique,* vol. 11, Spring (2002).
—— ed.: *Violence* (Santa Fe: School of American Research Press/Oxford: James Currey, 2004).

WIHARTA, SHARON:
"Peace-building: the new international focus on Africa", in *SIPRI Yearbook 2006* (Oxford: Oxford University Press, 2006).

WILCOX, GREG AND GARY I. WILSON:
"Military Response to Fourth Generation Warfare in Afghanistan", *EmergencyNet News*, 5 May 2002 [Emergency Response and Research Institute (online)], URL: http://www.emergency.com/2002/4gw5may02.htm.

WILSON, BRANDAN:
"Tribal Tendencies, Global Realities: Islamic Group Dynamics in the Modern World", Center for Contemporary Conflict, Monterey, Naval Postgraduate School, 2 June, 2003.

WILSON, G.I., GREG WILCOX AND CHET RICHARDS:
"Fourth Generation Warfare & The OODA Loop; Implications of the Iraqi Insurgency", *Defense and National Interest*, December 2004 (online), URL: http://www.d-n-i.net/fcs/ppt/4gw_ooda_iraq.ppt.

WINDSOR, PHILIP:
"Strategic Thinking after the Cold War", in *Studies in International Relations – Essays by Philip Windsor*, ed. Mats Berdal (Brighton: Sussex Academic Press, 2002).
—— "The Future of Strategic Studies", unpublished paper, n.d.

WRIGHT, ROBERT:
Non-Zero: The Logic of Human Destiny (New York: Vintage, 2001).

ZEMAN, ZBYNEK:
Pursued by a Bear: The Making of Eastern Europe (London: Chatto & Windus, 1989).

OTHER SOURCES

"Homeland Security. Al-Qaeda", *Global Security.org*, n.d. (online 18 Apr 2007), URL: http://www.globalsecurity.org/security/profiles/al-qaeda.htm.

"Iraq death toll 'soared post-war'", *BBC*, 29 October 2004 (online 18 Apr 2007), URL: news.bbc.co.uk/2/hi/middle_east/3962969.stm.

"Oiling the wheels of war: smuggling becomes the real economy of Iraq", *Guardian*, 9 June 2007.

"Testimony of General John Abizaid, Commander CENTCOM, before the Senate Armed Service Comt. 25 September 2003", *GlobalSecurity.org*, 25 September 2003 (online 17 Apr 2007), URL: www.globalsecurity.org/military/library/congress/2003_hr/abizaid.pdf.

"Van Riper's E-Mail to Pace, Hagee, and Schoomaker Regarding JCIDS", *Inside the Navy*, 23 January 2006.

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