



Creating strategic corporals? Preparing soldiers for future conflict ¹

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Introduction

The wars and other armed conflicts over the past century—since the time of the ‘Great War for Civilisation’ (which has become known as the First World War)—have seen substantial changes in many key areas of military science and technique.² Wars of position have been replaced by battles of manoeuvre and, largely as a consequence, massed battles have been supplanted by the actions of small (or smaller) units; battlefields are now unlikely to be remote from larger towns and cities, and civilian casualties (sometimes deliberate, sometimes unintentional) continue to rise; technology has made weapons more lethal and more accurate, communications instantaneous, and killing often more remote and clinical.

By contrast, the fundamental causes of war, at least as Thucydides presented them 2500 years ago—fear, honour and interest—have not changed. Nor has the fact that taking lives and fighting for your life is traumatic for combatants themselves; and nor has the likelihood that we will continue to wage war against each other into the foreseeable future at almost any cost to our material, social and psychological wellbeing. The only limit we have so far recognised, with two

terrible exceptions, is with the indiscriminate nature of, and potential for human extinction embodied in, nuclear weapons; and on this self-imposed limitation there is no absolute guarantee into the future.

In these changes over the past century, what has been asked of the soldiers—and sailors and aircrew—has also changed. In armed conflicts, we expect soldiers of all ranks to be able to operate more autonomously, to exercise considerable judgment in (and take responsibility for) their actions, to be technically proficient, and to understand the larger picture of which their efforts are merely a part. No longer are soldiers ‘cannon fodder’. In front-line forces, there are fewer of them and their actions count more than in the past; they are highly trained and extensively equipped and supported; and the loss of their lives is felt—particularly in modern democracies—as a national and political tragedy.

This emphasis on individual soldiers, their physical safety in the field and their physical, emotional and psychological well-being after the conflict, is matched by the increasing surveillance over their actions, especially in the field, by the established media as well as by the electronic communications technologies that have expanded into almost every aspect of our lives in recent years. But soldiers are increasingly asked to do much more than fight in armed conflicts, especially over the last three or four decades. They act as peacekeepers, often in volatile situations. They act as emergency responders in natural disasters. And they act in constabulary roles in a variety of challenging areas, including drug and people smuggling.

Nations now look to their armed forces for professional, thoughtful and effectual but restrained behaviours that do credit to their flag. The devolution of considerable authority to soldiers at the point of action, the sometimes conflicting demands the mission makes of them, the provocations they often face, and the scrutiny



that they are consistently under, all demand a degree of education and training of soldiers, and of a more general preparedness, that is the subject of this article.

Charles Krulak's notion of the 'strategic corporal' drew attention to a number of the challenges facing soldiers in recent conflicts.³ These include the complexity of the modern battlefield and the range of tasks that need to be prioritised and addressed; the role of the more junior ranks in making important decisions within their field of operation (whether by the incapacity of officers, the inability to receive communications, or an increasingly small-group approach to many operations); and the ever-present scrutiny of their actions and thus potentially mission-crippling nature of their errors being broadcast to the world. Yet the initiative, sense of responsibility and preparedness expected by Krulak of the corporal are best extended to all soldiers.

This article begins with some reflections about the future of conflict: the challenges, in other words, that soldiers will need to confront in the near- to medium-future. Krulak's notion of the 'three-block war' encapsulates some of these issues but my purpose here is to canvass the breadth of the matters of which soldiers should have some understanding. Arguing that technology will play an ever-larger role in future conflict, I stress that the challenges confronting human beings are not thereby diminished and, in some ways, demand even more attention.

The third substantive section outlines some of the ways in which an appropriate level of preparedness among soldiers can be developed. My central theme is that precisely because of the difficulties of predicting the future of conflict in any but a coarse-grained sense, preparing our soldiers for the unexpected challenges that will inevitably arise needs to be given as much attention as the acquisition of weapons platforms (over which nations agonise deeply and spend extravagantly).

The future of conflict

It seems to be a Danish proverb, sometimes attributed to the physicist Niels Bohr, that '[p]rediction is very difficult, especially if it's about the future'. But in writing of 'the future', I want to limit my horizon to the next 30 years. That, broadly speaking, is the career span of an officer cadet or midshipman entering the ADF today. If we look to the next 30 years, what can we expect with reasonable certainty?

To sharpen our focus further, think of the 30 years since 1984. It was not quite the year that George Orwell had predicted in his dystopian vision, though some of its themes rang true, especially about the corruption and control of language. And Orwell's warnings about pervasive surveillance of our everyday lives are increasingly and deeply worrisome.

In 1984, the Cold War was in full swing.⁴ The first Macintosh personal computer came onto the market, changing the face of personal computing forever with its use of a graphic interface.⁵ Three years later, China's 'reform and open' policy was launched by Deng Xiaoping, which has led to the spectacular economic and strategic rise of China. The Soviet Eastern bloc collapsed in 1989 and the Soviet Union itself followed in 1991. Al-Qaeda launched its boldest attack against the US in 2001, and US forces subsequently invaded Afghanistan and then—on the same anti-terrorist pretext—invaded Iraq in 2003 and overthrew the regime of Saddam Hussein.

This has opened an era of sectarian violence in the Middle East that threatens to last for generations. In the Arab world since 2010, a large number of previously-secure rulers have been unseated and civil wars and other conflicts continue to destabilise the region. Though democracy was the great hope of this 'Arab Spring', the reality has proved more diverse and more troubling. So there have been enormous political changes, most of them unpredicted.

The Internet, an electronic networking system conceived in the early 1960s as a way to provide a robust, distributed communication system for

US defence purposes, was increasingly deployed by academia in the 1980s, and began to be commercialised in the 1990s.⁶ This technology has shaped modern communications, with the development of mobile telephony and so-called 'smart phones' becoming available from the mid-1990s, and exploding in 2007 with the release of the first iPhone.

So there have been enormous technological changes, particularly in communications. Weaponry has incorporated and sometimes led these changes, including the introduction of precision-guided weapons that first saw wide use in the Gulf War in 1990-91. The threat of nuclear weapons has receded from view but, at the same time, the lethality of conventional weapons has increased many-fold.

In international relations, we had hopes (and some misgivings) for a 'new world order'; for an 'end to history'; and for the triumph of democracy. In other words, we anticipated—for 'one brief, shining moment', to coin a musical phrase—a harmonious world. What we have seen since the late 1990s but especially since '9-11', instead is a world where democracy appears increasingly unattractive; where some unfree states, notably China, seem to have cracked the code of wealth-creation, creating an attractive model for developing states; and where the abolition of the distinction between Church and state, in a new Islamic caliphate, has become a cause to which thousands are prepared to take up arms, even and especially against their co-religionists. These models are now in active, and sometimes bloody, competition against each other.

The unsurprising lesson of such an overview of 30 years is that change will continue—and will continue to surprise us. And, independent of such changes, though often linked to them, we also know that conflict will continue. Conflict is an inescapable element of the human story. Many of our human institutions are creative responses to conflict, channeling competitive energies into politics, law, markets, diplomacy and so on. But force remains the ultimate arbiter of human disputes.

What sort of wars will we fight in the next 30 years? It has been observed that wars between states themselves have declined since the end of the Second World War, and that wars of a new type—wars within states, over issues of identity, fought in unconventional ways and with unconventional financing—will predominate. Mary Kaldor is rightly prominent among a number of analysts who have made such points, and I will not gainsay them.⁷

Yet we should not be complacent that interstate wars are now impossible, especially on the basis of our impressive material achievements. We certainly have a lot to lose. But European states at the height of their material and cultural civilisation went to a disastrous war in 1914, and large modern cities—Coventry, London, Tokyo, Dresden, not to mention Hiroshima and Nagasaki—have in subsequent wars been devastated by aerial bombing and associated firestorms. We should not limit our thinking, or our preparation, by denying some futures as 'unthinkable'.

If we ought to acknowledge that interstate wars are not impossible, we should also be alive to the changes and challenges in guerrilla warfare. Fighting insurgents in remote environments in Afghanistan and Iraq, as we have been doing for more than a decade, does not constitute the 'textbook'. David Kilcullen rightly reminds us that the key megatrends—rapid population growth, urbanisation, littoralisation and global networked connectivity—will confront us with diverse operating environments for which we need different types of capabilities and preparation. He summarises his point by anticipating an age of the 'urban guerrilla'.⁸

What we should acknowledge at the very least is that the conflict scenarios of the future are unpredictable within a wide arc, and will be complex.

Another point arises from the experience of the last 30 years (and of the history of conflict more generally) which is crucial but I think often overlooked or discounted in these sorts of discussions. Wars of all sorts are terrible but they

are rarely decisive. They do not, on the whole, solve problems. As Thomas Hobbes put it in the 17th century, there is no better 'hope to mend an ill game, as by causing a new shuffle'.⁹ We must know that even if we are obliged or choose to fight a war, the application of force is unlikely to solve the problems that led to it.

Indeed, open conflict merely indicates that one equilibrium has broken down. That equilibrium may have been precarious, or unjust, or in other ways undesirable but its destruction may unleash a Pandora's box of troubles, giving succour to the discontented, the opportunists and the spoilers. Wars do not promise ready or clean solutions. That is, in addition, because wars themselves often create new points of disagreement or injustice.

We need to have clear and realistic views about what wars can achieve when we embark upon them. In his 1827 letter to Major Carl von Roeder, where he famously pointed out that war 'is the continuation of politics by different means', Clausewitz went on to state the consequence of this view that 'there can be no question of a *purely military* evaluation of a great strategic issue, nor of a purely military scheme to solve it'.¹⁰

In irregular war—much more than in regular war (where battles tend to be decisive)—the political dimension is key. Lawrence Freedman noted that we should not be too despondent about our capacity to deal with irregular warfare as a military problem, contending that:

The key point however is that the military strategy must be integrated with a political strategy. If the side we are supporting is weak it is probably because it lacks a strong political base and is prone to division.... The side with the strongest political foundations should prevail militarily.¹¹

General Wesley K. Clark has argued that the US intervention into Iraq in 2003 was 'a perfect example of dominating an enemy force but failing to secure the victory'.¹² And especially if we *choose* to go to war, we must also be aware of the role of chance. Winston Churchill in 1930 advised that:

[Any] statesman who yields to war fever must realize that once the signal is given, he is no longer the master of policy but the slave of unforeseeable and uncontrollable events. Antiquated War Offices, weak, incompetent or arrogant commanders, untrustworthy allies, hostile neutrals, malignant fortune, ugly surprises, awful miscalculations—all take their seat at the council board on the morrow of a declaration of war.¹³

So wars of the future will be, as they have been in the past, unpredictable, complex and inherently limited in their ability to provide solutions.

One further point I will hazard with a reasonable degree of confidence is that it is unlikely that in the next 30 years Australia will fight a war for its existence as a sovereign state. Therefore, the conflicts in which Australian soldiers will take part will be wars of choice, and will almost certainly be in coalition with our allies, and will be at some remove from our shores.

All these predictions have ramifications for equipment and capability but they do not change the human factors of dealing with the experience of battle. In some respects, they deepen the complications. The ADF will, consequently, continue to be a professional and not a conscript defence force. That means that we not only *need* to think but we can *act* to prepare ADF soldiers to the best of our ability.

Technology and organisation

Technology has become the handmaiden of the imagination. And we can expect continuing, significant and rapid technological change over the next 30 years. But how will it affect warfare? I begin my answer with a cautionary point. The impressive military technologies of today give the very misleading impression—to both politicians and citizens alike—that modern wars can be won by technology and no longer need involve large inputs of human power or loss of life. And the reliance on technology does not absolve the decision makers 'from hard questions of strategy and policy' (which Russell Weigley argued was a dangerous American tendency);¹⁴ and nor should it lower the policy threshold of the use of force as a last resort.

This point having been made, let me cover some of the principal areas where our military technologies will further assist our ability to wage war. In no particular order of priority, we may expect:

- An increased ability to cut through the ‘fog of war’—those issues of situational battlefield awareness that Clausewitz drew to our attention, and that Tolstoy communicated so well in the battle scenes of *War and peace*;
- An increased ability to be more effectively and precisely lethal in the application of force;
- A better ability to do ‘more with less’; in the face of increasing challenges to national budgets, to get more lethality, more mobility and more firepower from a smaller number of weapons platforms;
- An ability to be more nimble in both getting to the battlefield, moving around it, and extracting oneself and one’s wounded comrades from it if necessary; and
- Finally, an ability to be better protected and better able to survive what previously would have been considered fatal wounds.

These ‘clusters’ of abilities will be variously addressed and implemented by new and developing technologies. All of them will continue to develop as they have developed across the history of organised warfare for centuries. What is different, perhaps, is the attention, seriousness and (consequently) funding they will receive, and the likely rapidity with which they will advance. The best technical and theoretical minds applied themselves to advances in warfare in the 20th century, in Bletchley Park, Los Alamos and elsewhere, and this will doubtless continue.

While this organised human activity is fascinating, I confess that I don’t find the technologies all that interesting in themselves. Identifying problems and devising fixes are what humans have become extraordinarily good at over the past two or three hundred years. Max Weber called it *Zweckrationalität*—instrumental or goal-oriented

rationality—and argued that it had become a dominant characteristic of modernity.¹⁵

Technology is not an unalloyed good; it has the potential for unintended consequences. The use of precision-guided weapons might degrade the barriers against using nuclear weapons, or enemies might use pernicious tactics to strike back (such as using human shields or the Iraqi burning of Kuwaiti oil fields in 1991). The technology that allows people to aim and fire weapons remotely can mean that killing is not felt to be ‘real’, diminishing restraints.

The increasing technological integration of civilian and military systems means that any ‘cyber war’ will likely impact citizens and civilian infrastructure (especially the increasingly ubiquitous machine-to-machine communications, or the so-called ‘internet of things’)¹⁶, and not just military systems. (That, indeed, might be its very purpose.)

Technology may also lower the threshold of conflict, by one party considering that certain sorts of technological interference constitute ‘aggression’. It also may lower restraints on the idea that force should be used only as a last resort. And when soldiers are provided with the ‘larger picture’ that the new IT allows, they are ‘likely to second-guess decisions made at higher levels and (in richly-connected systems) have the information required to undertake initiatives their superiors may find inappropriate’.¹⁷

Soldiers, of course, will become much more adept at using the new technologies, just as children nowadays have an almost intuitive sense of how to use smart phones and computer tablets. But soldiers will still suffer fatigue and rely on judgments, good and bad. They will be courageous and afraid; they will be daring and timid; generous and mean-spirited; and I am certain they will continue to find the taking of others’ lives repugnant, even if sometimes necessary. John Keegan has rightly stressed this human dimension:

What battles have in common is human: the behaviour of men struggling to reconcile their instinct for self-preservation, their sense of honour and the achievement

of some aim over which other men are ready to kill them. The study of battle is therefore always a study of fear and usually of courage; always of leadership, usually of obedience; always of compulsion, sometimes of insubordination; always of anxiety, sometimes of elation or catharsis; always of uncertainty and doubt, misinformation and misapprehension, usually also of faith and sometimes of vision; always of violence, sometimes also of cruelty, self-sacrifice, compassion; above all, it is always a study of solidarity and usually also of disintegration—for it is towards the disintegration of human groups that battle is directed.¹⁸

Soldiers need to be ‘trained’ for the use of technology but they need to be ‘prepared’ more broadly for fighting wars. The human factor is the most important factor in war: in starting wars; in fighting wars; and in ending wars and rebuilding. Intrinsic to this factor is the organisation of Defence itself, on which I shall dwell for a moment.

Modern warfare is essentially industrial and bureaucratic. Ironically, the ability to engage in conflict requires the highest levels of cooperation and organisation. If hierarchy and bureaucracy (in the neutral, Weberian sense) are the best ways of getting human beings organised to pursue certain tasks, it is not surprising that militaries should be their exemplars. But bureaucracies have their drawbacks—and it is worth mentioning three in particular that can impact on our ‘prepared’ soldier’s ability to function strategically in combat.

First, bureaucracies tend to be risk-averse and obsessed with control; they feel threatened by different and challenging ideas, by open debate, by the unexpected. I know, or know of, senior leaders who are not like this. But most of their subordinates either chafe at, or quietly endure, the confines within which they must work and think; and some—through a process of socialisation—no longer see the confines at all. The soldier or official who disrupts the bureaucratic logic of control may well find himself with a short career.

I have hitherto used the masculine gender, and it relates to my second point: that the Australian military and military bureaucracy is not a diverse culture. The ADF is largely white and male (that is,

predominantly male and third-generation Australian). A recent report from within the organisation argued that ‘the language practices of Defence are mechanisms that thwart diversity and greater social inclusion’.¹⁹

A more diverse workforce would better represent the Australian people that Defence serves, allowing varied perspectives and enhanced operational capability. And as a professional service, uniformed and civilian, Defence needs to be attractive as a place for people to work, and to stem the attrition of highly-trained people. Nick Jans has described the ADF as consisting of four ‘tribes’: Navy, Army, Air Force and Australian Public Service.²⁰ Part of the preparation of soldiers must be to understand better the members of those other tribes with whom they will almost inevitably work in the conflicts to come, and to understand the broader community from which they are drawn.

The third issue is the ceaseless bureaucratic activity of Defence: the stress on process rather than outcomes, the hamster-wheel of extraordinary exertion, even and especially in times of peace, inducing fatigue and straining commitment.

Therefore, when we try to imagine (and prepare for) future conflicts, we should think less of the development of incipient and even imagined technologies of killing—however ingenious, effectual and precise—and more of the qualities and attitudes that are required for the successful prosecution of a war and the ultimate resolution of the issues that led to it. For they are essential if conflict is not simply to smoulder and subsequently reignite: if the deck is not to be reshuffled once again, to echo Hobbes. How do we develop such soldiers?

The prepared soldier

First of all, soldiers should know in general terms where they stand in the scheme of Defence, and where Defence stands in the scheme of government. They should know the risks and the limitations of war as a means of resolving conflict. They need to be convinced that the conflict in

which they put their lives at risk, and will likely take the lives of others, has a sound cause and a strong likelihood of success, and is not merely the product of grandiose personal ambitions, rivalries fanned by unthinking jingoism or desperation.

Like every citizen, they should be able to discern whether a war involves decisive action, with clear exit points, and transparent goals related to vital interests. While they might be familiar with the geographical landscape on which they operate, they should also be aware of its cultural landscape; not just to honour in some sort of token way the cultural achievements of their enemies, or even to be aware of the taboos the breaking of which can damage their relations with the local people (especially important in a counter-insurgency conflict) but to understand the conflict from the side of the enemy, the better to judge their seriousness and motivations, and the depth of their hostility, and in the final analysis why the enemy is trying to kill them.

As I have argued elsewhere, the advanced study of history, of politics, of law, and of literature are essential to the modern soldier, and not just to the circle of officers, in developing the types of understanding I have just outlined.²¹ The study of history is not about 'learning from the mistakes of the past'; rather, it allows us to see the vast range of human responses to particular situations, to consider possibilities and boundaries. Literature stimulates the soldier to imaginatively construct the feel of the battlefield, and to understand how different—but at the same time how similar—he or she is to others, even across age, gender, ethnic, religious and cultural divides.

Politics and its sub-discipline, international relations, allow a soldier to understand the reasons for a conflict and the likelihood of a just settlement. And politics, furthermore, opens up the world of the underlying power structures of the societies in which it is operating, supplemented perhaps by social anthropology. Law reinforces the importance of sets of rules of behaviour not just in the societies in which a soldier might be operating but in the conduct of war itself. And the discipline of ethics also has something to contribute, for while technology

sometimes gives a decisive edge in battle, the human control of technology requires ethical decision-making, and the ability to hold humans to account for their actions.²²

I am not advocating the development of 'soldier-scholars', though there have always been some soldiers who value the cultivation of their broader intellect almost as much as their professional mastery. Rather, I am commending the ability to process the vast amounts of information with which we are confronted to create *knowledge*: ordered and connected information.

In his 19th century discussion on *The idea of a university*, Cardinal Newman described the sort of intellect I think the soldier should have: 'one which takes a connected view of old and new, past and present, far and near, and which has an insight into the influence of all these one on another; without which there is no whole, and no centre'.²³ He called this a 'liberal education', by which he meant the development of *useful* and *relevant* knowledge but not directly *applied* knowledge (for which training was the appropriate avenue). The distinction between training and education is even more relevant today.

The challenges of future conflict, in so far as we can anticipate them, also and relatedly, mean that soldiers need to develop a leadership style that embraces and encourages colleagues and subordinates: a collective style that cares about and draws from the collective to make good decisions, and engages all its members. The ability to develop trust in collectives, teams, is vital to the development of this leadership style.

Leadership and hierarchy are not synonymous concepts: hierarchical authority does not necessarily equate with experience or good decisions. The ability of senior ranks to listen to their juniors is critical. Sociologically, this style emerges more readily from a democratic society, the removal of the aristocratic element from military leadership, and the modern emphasis on merit and knowledge. A genuine discussion over strategy and tactics between different ranks that was almost unthinkable in 19th-century Prussia,

for example, is nowadays taken as granted. Hierarchy has become the last refuge of the intellectually insecure.

Because of the almost universal human injunctions against killing, and what Dave Grossman has described as the 'innate resistance to killing their fellow human beings',²⁴ there needs also to be an educated self-consciousness of how the act of killing will be handled mentally by those who do it, and a recognition that time for group de-compression at the end of a tour of duty, and frank and intelligent responses by society at large to widespread instances of Post-Traumatic Stress Disorder from returned soldiers need to be developed.

The reality of being in a war zone one day and the safety of home in 24 or 48 hours is challenging for soldiers to process. And increasingly this aspect of what might be called 'post-modern conflict' and its dangers are being recognised. But soldiers must first know what to expect, much as Elisabeth Kübler-Ross analysed the five stages of grief when confronted by impending death.²⁵ I endorse Grossman's view that:

[I]f society prepares a soldier to overcome his resistance to killing and places him in an environment in which he will kill, then that society has an obligation to deal forthrightly, intelligently, and morally with the result and its repercussions upon the soldier and the society.²⁶

Conclusion

There have been many 'models' of soldiers in the past, from the patrician soldier of ancient Rome, personified by the statesman Cincinnatus, who reluctantly took up public office and returned to his farm once the task was done (and to whom George Washington was often compared)²⁷, to the soldier as expendable 'pawn' or, in the 19th-century expression, 'cannon-fodder'. But the sociology of armed forces has changed.

Our democratic sensibilities recommend a more cooperative hierarchy of abilities and talents, and the creation of the 'citizen-soldier'. Aristocratic hangovers lurk harmlessly in ceremonial uniforms and Mess rituals, which have a way of reinforcing the distinction between insider and outsider. The

new technologies of war have empowered modern soldiers and reinforced meritocracy but underlined the importance of soldiers' ability to partake in cooperative leadership. Their education must develop the skills—and the *courage*—of independent judgment; their formal education must be the start of a process of lifelong learning.

Soldiers are not simply people who go onto the battlefield and fire their weapons, or whose chief virtue is 'obedience'. They are the spearhead of a vast organisational chain, the results of years of preparation, and they must be the very best we can manage. Their lives are better protected the better educated they are; the more informed about their mission and their enemy; the more they can participate in the leadership of their mission; and the more they can appreciate the strains of battle and how to cope with stress and death. Prepared soldiers are resilient.

The soldiers who put their lives at risk for their country today need a complex set of intellectual strengths and insights to take with them into battle along with their weapons. Where their enemies may be zealots in some religious or ideological cause, they need an appreciation that tolerance and diversity are worth fighting for. I grant that these *desiderata* represent a tall order but, without a liberal education, such an order has no chance of being filled.

One further, crucial point needs to be kept in mind. None of the emphasis in this essay on preparedness for responding to the intensified challenges of the modern battlefield reduces the importance of the overarching strategic decisions which put soldiers on that field in the first place. A prepared soldier cannot substitute for a poor strategy.

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Notes

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- ¹ This article was published in Issue No. 200 of the *Australian Defence Force Journal* in 2016.
 - ² See, for example, Robert Fisk, *The great war for civilisation: the conquest of the Middle East*, Fourth Estate: London, 2005.
 - ³ Charles C. Krulak, 'The strategic corporal: leadership in the three block war', *Marines Magazine*, January 1999, available at http://www.au.af.mil/au/awc/awcgate/usmc/strategic_corporal.htm accessed 28 June 2016.
 - ⁴ See, for example, Richard H. Immerman and Petra Goedde (eds.), *Oxford handbook of the Cold War*, Oxford University Press: Oxford, 2013.
 - ⁵ Steven Levy, *Insanely great: the life and times of the Macintosh, the computer that changes everything*, Viking: New York, 1994.
 - ⁶ Critical was work done by the Defense Advanced Research Projects Agency; for a fuller and detailed account, see Barry M. Leiner, Vinton G. Cerf, David D. Clark, Robert E. Kahn, Leonard Kleinrock, Daniel C. Lynch, Jon Postel, Larry G. Roberts and Stephen Wolff, 'Brief history of the Internet', *Internet Society* [website], available at <http://www.internetsociety.org/internet/what-internet/history-internet/brief-history-internet#> accessed 21 July 2015.

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- ⁷ Mary Kaldor, *New and old wars*, 3rd Edition, Polity Press: Cambridge, 2012.
- ⁸ David Kilcullen, *Out of the mountains: the coming age of the urban guerrilla*, Hurst: London, 2013.
- ⁹ Thomas Hobbes, *Leviathan*, edited by Richard Tuck, Cambridge University Press: Cambridge, 1991, p. 71.
- ¹⁰ Cited Peter Paret, 'The genesis of *On war*', in Carl von Clausewitz, *On war*, edited and translated Michael Howard and Peter Paret, The Folio Society: London, 2011, p. xxx.
- ¹¹ Lawrence Freedman, 'Regular and irregular war', *Strategic Datalink* [website], August 2008, available at <<http://opencanada.org/reports/strategic-datalink/>> accessed 10 July 2015.
- ¹² Wesley K. Clark, *Winning modern wars: Iraq, terrorism, and the American empire*, Public Affairs: New York, 2003, p. xiv.
- ¹³ Winston S. Churchill, *My early life: a roving commission*, The Folio Society: London, 2007, p. 231.
- ¹⁴ Russell F. Weigley, *The American way of war: a history of United States military strategy and policy*, Indiana University Press: Bloomington, 1977, p. 416.
- ¹⁵ Max Weber, *Economy and society: an outline of interpretive sociology*, as edited by Guenther Roth and Claus Wittich, University of California Press: Berkeley, 1978, pp. 24-5.
- ¹⁶ For a sanguine account of M2M, see Jan Holler, Vlasios Tsiatsis, Catherine Mulligan, Stefan Avesand, Stamatis Karnouskos and David Boyle, *From machine-to-machine to the Internet of things: introduction to a new age of intelligence*, Academic Press: Amsterdam, 2014.
- ¹⁷ David S. Alberts, *The unintended consequences of information age technologies: avoiding the pitfalls, seizing the initiative*, Institute for National Strategic Studies, National Defense University: Washington DC, 1996, p. 36.
- ¹⁸ John Keegan, *The face of battle*, The Folio Society: London, 2008, p. 277.
- ¹⁹ Elizabeth A. Thomson, *Battling with words: a study of language, diversity and social inclusion in the Australian Department of Defence*, Department of Defence: Canberra, 2014, p. xi.
- ²⁰ Nick Jans (with David Schmidtchen), *The real c-cubed: culture, careers and climate, and how they affect capability*, Canberra Papers on Strategy and Defence No. 143, Australian National University: Canberra, 2002, pp. 121-38.
- ²¹ David W. Lovell, 'Educating for ethical behaviour? Preparing military leaders for ethical challenges', in David W. Lovell and Igor Primoratz (eds.), *Protecting civilians during violent conflict: theoretical and practical issues for the 21st century*, Ashgate: Farnham, 2012, pp. 141-57.
- ²² See Rebecca J. Johnson, 'Moral formation of the strategic corporal', in Paolo Tripodi and Jessica Wolfendale (eds.), *New wars and new soldiers: military ethics in the contemporary world*, Ashgate: Farnham, 2011, pp. 239-56.
- ²³ John Henry Newman, 'The idea of a university defined and illustrated, 1852', *Newman Reader* [website], available at <<http://www.newmanreader.org/works/idea/discourse6.html>> accessed 10 July 2015.
- ²⁴ Dave Grossman, *On killing: the psychological cost of learning to kill in war and society*, revised edition, Little, Brown and Company: New York, 2009, p. 13.
- ²⁵ Elisabeth Kübler-Ross, *On death and dying*, Tavistock Publications: London, 1970.
- ²⁶ Grossman, *On killing*, p. 287.
- ²⁷ See Minor Myers, *Liberty without anarchy: a history of the society of the Cincinnati*, University Press of Virginia: Charlottesville, 2004.