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Introduction

The era of the strategic corporal is here. The soldier of today must possess professional mastery of warfare, but match this with political and media sensitivity.

-LtGen Peter Leahy, Chief of the Australian Army

To meet the challenges of tomorrow's wars, Western countries will need highly mobile, well equipped, and versatile forces capable of multidimensional coalition missions and mastery of persuasion, coercion, and violence across a complex spectrum of conflict.¹ Although the prospect of a high intensity conventional conflict can not be lightly dismissed, the predominant characteristics of future war will be those characteristics most often associated with small wars and operations other than war. That is, future war is going to be highly complex, lethal, chaotic, asymmetric and increasingly politicized. And, the pervasive presence of the media will ensure the accelerated dissemination of any negative action. Increasingly, success or failure is going to rest with junior leaders who will daily make dozens of tactical decisions that have the potential to erode the political and operational credibility and legitimacy of an operation. The capacity to fight and win in such an environment, therefore, will be greatly increased by enhancing and sustaining the professional mastery of the junior leader—the Strategic Corporal.²

This paper argues that in preparing for future war, innovative armies can not rely only on structural changes or technological innovations to ensure a decisive edge. Indeed, to do so is dangerous because the assumptions underpinning the technological transformation—that emerging technologies will lift the fog of war and provide a high degree of certainty, and that enhanced, precision guided munitions in concert with

network-centric command and control architecture will by default be decisive—are inherently flawed.³ Rather, to ensure a decisive edge on the future battlefield, a substantial transformation must occur in the human dimension of warfare. In particular, emphasis must be placed on enhancing the ability of our junior leaders to meet the challenges of future war. To do so requires three significant actions. First, there must be a reassessment of the application of force. Routinely defaulting to the use of overwhelming force must give way to consideration of all available applications of power, persuasion and coercion. Second, junior leaders must be trained, educated, and experienced in operating in complex and ambiguous environments. And finally, a command climate that truly empowers junior leaders and promotes freedom of action by those same leaders to exploit opportunity within the overall commander’s intent must be developed and institutionalized.

Reassessing the Application of Force

The predominant characteristics of future war will be those characteristics most often associated with small wars and operations other than war. This will have significant implication for the way force should be applied to achieve tactical and operational success. Unfortunately, very few Western armies can afford a specialist force devoted only to small wars and operations other than war.⁴ To be successful across the likely spectrum of conflict armies will be required to transition rapidly between types of conflict and be fully prepared to escalate and de-escalate the use of force as appropriate.⁵ To enhance the ability of our Strategic Corporals to apply the appropriate level of force at the appropriate time requires inculcating the force with a cultural mindset that embraces

all available applications of force, rather than one that defaults immediately to the use of overwhelming force in each instance.

Although the diffusion of advanced technologies has created the very real threat of ever increasing destructive power, up to and including weapons of mass destruction, falling into the hands of both state and non-state actors, there will continue to be a huge disparity in technological weaponry, mobility, and information collection and dissemination systems between the United States (and by inference, her allies) and her possible enemies. This disparity will contribute to “asymmetric avoidance behavior” on the part of her enemies. Such behavior seeks to draw any US coalition into increasingly intense, protracted and exhausting confrontation, preferably in complex terrain.⁶ At the operational and tactical level this strategy is executed through unconventional means—insurgency featuring terrorism and guerilla warfare, subversion, and destructive information operations—making decisive military responses problematic.⁷

Importantly, many potential adversaries will have low tactical defeat thresholds—they are relatively easily beaten in combat. In contrast, their strategic threshold will be high, meaning they are relatively impervious to changes in political will, community support, or public opinion.⁸ Facing an opponent with a low tactical defeat threshold but a high strategic defeat threshold has direct implications for the way force should be applied. The use of physical force in this environment may lead to counter-productive unintended consequences, and risks alienating the population who, more often than not, tend to be the center of gravity.

To further complicate matters, the interpenetration of war and politics in small wars and operations other than war is much more pervasive compared with high intensity,

state versus state conventional conflict. There is the growing realization that military operations are now, and will continue to be, completely integrated with political, diplomatic, economic, and cultural activities. The challenge in the near future, more than ever, is to conceive military operations within a political framework.⁹ At first glance this is not a new concept. In some way, political considerations have always conditioned military operations. Clausewitz makes this a central theme of his theory of war, repeatedly stressing the subordination of war to politics, asserting that “war should never be thought of as something autonomous, but always as an instrument of policy.”¹⁰ The difference between past and future wars, however, is that in the past, politics was mainly a factor at the strategic level, where statecraft was required to guide the application of military power.¹¹ In a conventional war, individuals at the tactical level can afford to devote themselves largely to purely tactical issues. A competent conventional campaign design will ensure that tactical actions are linked to operational goals, which in turn are linked to campaign goals. Campaign goals, at least in theory, contribute to the attainment of strategic goals, which represent the nexus between the application of military power and the achievement of policy goals. Today and in future wars, however, politics will pervade all levels of war, especially when the application of purely military measures may not, by itself, secure victory because the solution to winning the conflict is likely to lie in the economic, political or social realms, rather than purely with the military.¹² The impact on the application of force is significant: junior commanders are now going to be required to understand campaign goals, and recognize the immediate and potential effects of their tactical actions at the operational and strategic levels of war.

The appropriate use of force becomes even more problematic for Western armies because, like their respective domestic society, these armies tend to be characterized with an aspiration to achieve quick results.¹³ Coupled with a predilection with technology that arguably “encourages the search for the quick, convenient solution, often at the expense of the less obvious, but ultimately more enduring one,” such an approach to warfare creates a presumption of near-immediate solution. This presumption, in turn, inevitably manifests itself in devoting considerable effort to the uncompromising destruction of the enemy’s forces, “rather than a more finely tuned harnessing of military effect to serve political intent—a distinction in the institutional understanding of military purpose.”¹⁴

This desire for immediate victory through decisive battle is ill-suited for small wars and operations other than war.¹⁵ Military professionals must learn to embrace the challenges of proportion, coercion, and dissuasion as well as the older tradition of battlefield destruction.¹⁶ In large-scale, high intensity conventional warfare, the use of force is relatively straightforward—it is normally overwhelming, synchronized, and designed to destroy, neutralize, or suppress the enemy to allow friendly maneuver. Not so in small wars and operations other than war, for “the motive in small wars is not material destruction.”¹⁷ The reason is that in highly politicized small wars restraint and legitimacy are key ingredients for success. In the first instance, the use of force is not an end in itself. Each time force is used, even if it is discriminating and apparently justified, it can undermine popular support, change perceptions, and alienate the local population. Second, if an enduring peace is the strategic endstate, then the legitimacy of the incumbent government in the eyes of the people is essential. In the struggle to gain control of the population, or at least passive acceptance by the population of the

adversary's cause, the legitimacy and rectitude of the incumbent governing power becomes a primary target as far as the adversaries are concerned.¹⁸ And, in a world of instant images, any inappropriate use of force will be leveraged against coalition and government security forces.

To be decisive, therefore, in the highly complex, politicized, and interconnected future battlefield, the aim must be to ensure that the application of force “can be modulated and shaped by professional militaries to accommodate rapidly shifting politics and flexible operational and strategic objectives.”¹⁹ Defaulting to the use of kinetic force to solve problems—normally the expected course of action in conventional warfare—is likely to be counterproductive in small wars, with negative second and third order effects eroding the political legitimacy of the operation. Drawing on a lesson that was supposedly learned during operations in Somalia in the early Nineties, and which will remain critically relevant for the near future, the required application of force “involves a mindset that looks at the local populace as potential allies rather than likely enemies, that gives repeated warnings before the application of force against any hostile act; that limits the application of force to the minimum level required, and that constantly seeks to engage in a dialogue rather than being tricked into overreaction.”²⁰ Such an expansive view of the use of force represents a paradigm shift away from the largely prevailing mindset that has been imbued in most Western armies designed and geared to fight a high intensity conventional war. Only by broadening the understanding of the use of force, recognizing and accounting for its potential second and third order effects, and understanding the link between tactical actions and the successful achievement of

operational objectives, will the potential for the Strategic Corporal's tactical actions to erode the political credibility of the mission be reduced.

Preparing for Complex Warfighting

Despite what proponents of the information revolution would have us believe, future war will remain characterized by friction, ambiguity and chaos, and will be more complex, diverse, and lethal than ever before. These characteristics are not new. What is new is that globalization,²¹ technology, and the increasingly pervasive presence of the media on the battlefield have caused these long-standing trends to interact in mutually reinforcing, real-time fashion to provide fresh challenges.²² To meet these challenges, a proposed list of requisite skills and capabilities for the junior leader includes as a minimum individual initiative, cultural sensitivity, media awareness, mediation skills, linguistic competence, mastery of sophisticated weapons and sensors, and a capacity for small group operations. To implant such skills and capabilities in future Strategic Corporals requires a deliberate and focused approach to education and training that differs from past efforts to prepare for conventional warfighting, and arguably requires junior leaders who are a great deal more experienced *before* assuming command than in previous eras.²³

For a training regime to effectively prepare junior leaders for future war it must recognize and prepare for the inherent presence of ambiguity, chaos, chance, and friction. A central thread woven throughout Clausewitz's *On War* is that war is comprised of countless and continuous interactions occurring in an unstable environment, and generating innumerable possibilities that defy prediction.²⁴ To compound matters, "no

other human activity is so continuously or universally bound up with chance,” meaning that “guesswork and luck come to play a great part in war.”²⁵ Additionally, the difficulties of war “accumulate and end by producing a kind of friction that is inconceivable unless one has experienced war,” so that in effect “everything in war is very simple, but the simplest thing is difficult.”²⁶ Future war will continue to be characterized by the unforeseeable effects generated through the nonlinearity of interaction, and therefore “facing up to the intrinsic presence of chance, complexity, and ambiguity in war is imperative.”²⁷

To maximize the potential for success, training must inculcate junior leaders with an attitude of multifunctionality rather than specialization, curiosity rather than complacency, and initiative rather than compliance.²⁸ In small wars, land forces will often be called upon to fight “below the intelligence, surveillance, target acquisition and reconnaissance threshold”—in circumstances where the adversary may not be detected until the combat action commences, and where battles develop as a series of surprise, fleeting encounters.²⁹ Preparing junior leaders to operate effectively in such an environment will only be achieved through realistic training that embraces conditions of chaos, uncertainty, and ambiguity, and employs a realistic, free-thinking opposing force, with real-world capabilities and strategies. Rather than conducting training within the traditional paradigm that perceives certain determinable linear cause-and-effect relationships—linking specific scripted activities with “required” training objectives that must be met for a unit to be deemed deployable—training must establish a context “that sees holistic, open, dynamic, emergent, complexly organized, rationalistic relationships that are too complex to be absolutely known. Applying knowledge and skill sets in this

complex and ambiguous environment, dealing with the unexpected, operating with incomplete information, and making calculated decisions of risk all increase individual agility.”³⁰ If leaders are not conditioned to cope with uncertainty they will be predisposed to wait for information rather than take resolute action when they encounter chaotic conditions.³¹ They will not be prepared to fight for information, and will be overwhelmed and struck by paralysis, becoming ineffective.

In addition to the challenges posed by ambiguity, chaos, chance, and friction on the battlefield, junior leaders must be prepared for the particular challenges presented by a pervasive media. By virtue of its real and perceived influence, and its virtually instantaneous effect, the media is a significant variable in any military operation. The consequence is that under virtually pervasive scrutiny, there can be no tolerance for the media-amplified Strategic Corporals who innocently or blatantly commit publicized acts of such grievous cultural ignorance as to erode political legitimacy and credibility.³² The ability of the media to shape perceptions, tactically, operationally, and strategically, will remain a key factor that underpins military operations in the future. The requirement for a comprehensive and holistic media training package, aimed at junior leaders rather than at just middle and senior leadership, that is continually interwoven throughout the training cycle and not instituted as “just in time” pre-deployment training, should be obvious.

Although a deliberate and focused training regime is necessary to enhance professional mastery, the future Strategic Corporal will require more than just skill and technical proficiency to perform his tasks. To complement training, the junior leader must also have a broader understanding of concepts and processes, and the knowledge

and understanding to justify his tactical actions within the overarching operational or campaign goals.³³ Additionally, as one current serving US Army General has indicated, “in the volatile, uncertain, complex, and ambiguous environment we face for the foreseeable future, if we were to choose merely one advantage over adversaries it would certainly be this: *to be superior in the art of learning and adaptation.*”³⁴ [emphasis in original] The key to developing a broader understanding of the relationship between tactical actions and operational and strategic objectives, and to developing a learning organization, lies in education. Indeed, if training prepares the individual to respond to a predictable situation or circumstance, while education prepares them for unpredictable situations, then the requirement for relevant and effective education becomes critical. Formal professional military education can no longer be seen simply as the purview of the officer corps, but must remain a central concern throughout the entire career of *the soldier.*³⁵

Perhaps the most important ingredient for qualitatively preparing the future Strategic Corporal to win on the future battlefield is experience. Arguably, appropriate experience will negate any deficiencies in training or education. At the point of contact, decision-making based on a deliberate, scientific, quantitative approach will give way to a more intuitive, recognitional, and cognitive approach. Speed, precision, lethality, and range of weapon systems have combined to compress events in time so that commanders must make decisions faster and therefore have less time to process and evaluate intelligence or relevant information. Additionally, the sheer volume of information available and the fact that much of it is conflicting ‘noise’ confuses situations further.³⁶ Experienced leaders will be better armed to make sound decisions in such situations.

Experience allows the decision-maker to detect leverage points and provides a chance to improvise in order to take advantage of these leverage points. Experience enables the decision-maker to recognize the existence of opportunities, develop a qualitative assessment of the situation based on judgement and experience, and prepares the decision-maker to improvise, act without all of the relevant information, or cope with unreliable data or shifting conditions.³⁷

Personnel policies that insist on rapid turnover of junior leaders, thereby inhibiting the consolidation of experience, must be changed to ensure that junior leaders spend longer in their profession before assuming command, and then greater time rank once in command.³⁸ Of course, in every military force faced with high operational tempo, competing demands, and finite resources, there is going to be some give and take between how much time, money and effort is committed to education, vice training, vice time in rank. Getting the balance right is complicated, though vital, and there is real value in increasing the base level of experience of junior leaders. Although mass has a certain quality of its own, in small wars it is the quality of the people that is the key determinate of success—a larger number of poorer troops, in a highly lethal, complex environment, will produce more casualties and more opportunities to undermine the legitimacy and credibility of the mission.

The Right Command Climate

More so than in high intensity conventional warfare, small wars and operations other than war will promote a greater dispersal of forces, and a greater devolution of responsibility further down the chain of command. Success or failure of an operation

will lie increasingly with junior leaders and their ability to consistently make the right decision at the right time at the point of contact.

Senior commanders must empower junior leaders to make snap decisions and apply effects from weapons and tactical actions that conform to the operational mission.³⁹ Additionally, senior commanders must willingly ensure that junior leaders are given the freedom of action to exploit opportunity within the overall commander's intent to achieve a common goal. The framework for this is provided by the concept of mission command—a decentralized command philosophy, aiming to allow faster, more relevant decision making, and underpinned by initiative, trust, and strong leadership—which means the concept can no longer be subscribed to in theory only, but must become a necessity.⁴⁰

Within the construct of mission command, senior commanders must direct (and realign as necessary) decentralized teams to ensure their activities continue to meet defined mission requirements. Junior leaders must be cognizant of the campaign goal and operational objectives, and understand their own role within the holistic plan. Mistakes, within reason, must be tolerated, and senior commanders must facilitate a climate that promotes centralized learning from decentralized mistakes.⁴¹ Finally, commanders must possess the imagination and intellectual framework to support innovation.⁴² It is not enough to wait for the “crucible experience” of combat to force junior leaders to innovate and become adaptive and agile. Only senior leadership can provide the vision and direction to create the command climate that ensures junior leaders are prepared *before* they go into future battle, and that once in battle promotes initiative and freedom of action within the guidelines provided by a clear and relevant intent.

Technology is No Panacea

Current efforts to dominate future land warfare focus largely on emerging technologies to increase precision, lethality, and mobility and to enhance command and control by lifting the fog of war and achieving near certainty for decision makers. Complementary efforts focus on changing force structure in a largely superficial attempt to devolve responsibility down to lower level commanders and flatten command structures, as well as introducing supposedly new and superior operating methods such as the United States Marine Corps Distributed Operations and the US Department of Defense Rapid Decisive Operations.⁴³ Such efforts leave the distinct impression of focusing too much on high technology to enhance conventional warfighting capability.

The pay-off for lifting the fog of war would certainly be huge: “dominant battlespace knowledge” will ensure “comprehensive awareness of all decision-relevant elements within a defined battlespace, and the ability to predict, with a very high degree of confidence, near term enemy actions and combat outcomes.”⁴⁴ There would be much less risk of Strategic Corporals undermining strategic credibility or legitimacy; in fact, there would be much less requirement for Strategic Corporals at all, as “precise knowledge of the enemy and friendly situations will facilitate exact tailoring of units for mission requirements; tactical employment of precision fires; exploitative decisive maneuver at extended ranges; and responsive, flexible support for those forces.”⁴⁵

Certainly, technological innovations have ameliorated sources of uncertainty over time, and communications and information systems technologies have reduced friction and increased operational tempo and agility; however, technology does have its limits. As a recent RAND study that assumed perfect functioning of all emerging technologies

in the year 2020 concluded, “an enemy who relies on cover, concealment, deception, intermingling, and dispersion will be difficult, if not impossible, to monitor from overhead assets,” and precision fires would only provide a degree of attrition at best.⁴⁶

Technology only enables. It is no substitute for the commander who, just as in Clausewitz’s day, will continue to be forced to “guess whether the first shock of battle will steel the enemy’s resolve and stiffen his resistance, or whether, like a Bologna flask, it will shatter as soon as its surface is scratched; . . . whether the burning pain of the injury he has been dealt will make the enemy collapse with exhaustion or, like a wounded bull, arouse his rage.”⁴⁷ There is no removing the human dimension from warfare. This is why any effort to prepare a military force that focuses only on improving technological-based capabilities, without a concomitant focus on preparing the decision makers—the Strategic Corporals—upon whose judgement the effective use of technology depends, is inadequate.

Conclusion

Given the complexity of future war the critical requirement to produce junior leaders capable of rapid and effective decision-making to solve complex problems in the often ambiguous, high risk circumstances that characterize warfare should be self-evident.⁴⁸ This paper has presented three significant actions required to enhance the professional mastery of the junior leader. First, a reassessment on the application of force must occur. This will ensure a shift away from the current predilection to default to overwhelming kinetic force to solve tactical problems and create the situation where all forms of persuasion, coercion and force are considered and able to be used as appropriate.

Second, junior leaders must be prepared for the complexities of future war through deliberate and focused training and education that emphasizes the chaotic and ambiguous character of the future battlefield and develops desired skills and capabilities.

Fundamental to this preparation is the requirement for junior leaders to be more experienced prior to assuming command than they are today. Finally, a command climate that truly empowers the Strategic Corporal and promotes freedom of action to exploit opportunity must exist.

Future war will see an ever increasing responsibility devolved to lower echelons of command, placing increasingly heavier burdens on the shoulders of junior commanders. Commenting on the future of land warfare, retired US Army Major General Robert Scales points out that “younger commanders will have to command soldiers they cannot see and make decisions without the senior leader’s hand directly on their shoulders. Distances between all the elements that provide support, such as fires and logistics, will demand that young commanders develop the skill to anticipate and think in time. Tomorrow’s tacticians will have to think at the operational level of war.”⁴⁹ Armed with greater firepower than ever before, the Strategic Corporal will be charged with greater responsibility than ever before, while the potential for his tactical actions to erode the political credibility and legitimacy of an operation will be higher than ever. To ignore the development of our Strategic Corporals is to do so at our peril.

Bibliography

Primary Sources

Books

Clausewitz, Karl von. *On War*. Edited and translated by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1984.

Evans, Michael and Alan Ryan, ed. *The Human Face of Warfare: Killing, Fear and Chaos in Battle*. Sydney: Allen and Unwin, 2000.

Friedman, Thomas L. *The Lexus and the Olive Tree: Understanding Globalization*. New York: Anchor Books, 1999.

Klein, Gary. *Sources of Power: How People Make Decisions*. Cambridge, MA: The MIT Press, 1998.

Merom, Gil. *How Democracies Lose Small Wars*. (Cambridge, UK: Cambridge University Press, 2003.

Murray, Williamson, and Allan R. Millet, ed. *Military Innovation in the Interwar Period*. Cambridge: Cambridge University Press, 1996.

Nagle, John A. *Learning to Eat Soup With a Knife: Counterinsurgency Lessons from Malaya and Vietnam*. Chicago: The University of Chicago Press, 2002.

Owens, Bill with Ed Offley, *Lifting the Fog of War*. New York: Farrar, Straus, and Giroux, 2000.

Scales, Robert H. Major General. *Yellow Smoke: The Future of Land Warfare of America's Military*. New York: Rowman and Littlefield Publishers, Inc., 2003.

Small Wars Manual: United States Marine Corps 1940. Kansas: Sunflower University Press, 1988.

Thompson, Robert. *Defeating Communist Insurgency: The Lessons of Malaya and Vietnam*. New York: Frederick A. Praeger Publishers, 1966.

Ulman, Harman et al., *Shock and Awe: Achieving Rapid Dominance*. Washington, D.C.: National Defense University, 1996.

Department of Defense and Doctrinal Publications

Australian Land Warfare Doctrine 1-0, *The Fundamentals of Land Warfare*. Victoria: Army Doctrine Centre, 2002.

Complex Warfighting Edition Two (Working Draft). Australian Army Future Land Operational Concept, correct as at 30 March 2005.

Headquarters United States Marine Corps, *A Concept for Distributed Operations* (Washington D.C.: Department of the Navy, 25 April 2005), accessed 26 October 2005, available from <http://www.mcwl.quantico.usmc.mil/A%20Concept%20for%20Distributed%20Operations%20-%20Final%20CMC%20signed%20co.pdf>; Internet.

Military Transformation: A Strategic Approach, Office of the Secretary of Defense, accessed 20 October 2005, available from http://www.of.t.osd.mil/library/library_files/document_297_MT_StrategyDoc1.pdf. Internet.

Periodicals, Articles, and Monographs

Allard, Kenneth. "Somalia Operations: Lessons Learned." *Institute for National Strategic Studies*. Accessed on 14 November 2005, available from http://www.au.af.mil/au/awc/awcgate/ndu/allard_somalia/allardch2.html, Internet.

Aylwin-Foster, N.R.F. Brigadier. *Operation Iraqi Freedom Phase 4: The Watershed the US Army Still Needs to Recognise?* (Unpublished paper, Royal College of Defence Studies, 2005 Course, copy in author's possession).

Beyerchen, Alan. "Clausewitz, Nonlinearity, and the Unpredictability of War." *International Security* (Winter 1992/93): 59-90.

Biddle, Stephen. *Afghanistan and the Future of Warfare: Implications for Army and Defense Policy*. Carlisle, PA: Strategic Studies Institute, November 2002.

Binnendijk, Hans, and Stuart E. Johnson. *Transforming for Stabilization and Reconstruction Operations*. Washington, D.C.: National Defense University Press, 2004.

Brownlee, Les, and General Peter J. Schoomaker. "Serving a Nation at War: A Campaign Quality Army with Joint and Expeditionary Capabilities." *Parameters* (Summer 2004): 4-23.

Cassidy, Robert Major. "Why Great Powers Fight Small Wars Badly," *Military Review* (September-October 2000):73-83.

- de Somer, Greg Lieutenant Colonel and Major David John Schmidtchen. *Professional Mastery: The Human Dimension of Warfighting Capability for the Army-After-Next* (Land Warfare Studies Centre Working Paper No.107). Duntroon, ACT: Land Warfare Studies Centre, October 1999.
- Echevarria, Antulio J. II. *Globalization and the Nature of War*. Carlisle, PA: Strategic Studies Institute, March 2003.
- Evans, Michael. "From Kadesh to Kandahar: Military Theory and the Future of War." *Naval War College Review* (Summer 2003, Vol LVI, No. 3): 132-150.
- _____. "Clausewitz's Chameleon: Military Theory and the Future of War," *Quadrant*, (November 2002, Vol XLVI, No.11): 1-11, accessed 26 October 2005, available from <http://www.quadrant.org.au/php/phpprint.php>, Internet.
- Fastabend, David A. BG and Robert H. Simpson. "Adapt or Die: The Imperative for a Culture of Innovation in the United States Army." *Army* (Vol. 54, February 2004): 1-12.
- Gehler, Christopher P. *Agile Leaders, Agile Institutions: Educating Adaptive and Innovative Leaders For Today and Tomorrow*. Carlisle, PA: Strategic Studies Institute, August 2005.
- Gray, Colin S. *Transformation and Strategic Surprise*. Carlisle, PA: Strategic Studies Institute, April 2005.
- Grey, Jeffrey. "Professional Military Education and the ADF." *Defender* (Spring 2004): 28-30.
- Hammes, Thomas X. "Insurgency: Modern Warfare Evolves into a Fourth Generation." *Strategic Forum* (January 2005) accessed 15 October 2005, available from <http://www.ndu.edu/inss/strforum/SF214/SF214.pdf>, Internet.
- Hanlon Jr., LtGen Edward. "Distributed Operations: The Time is Now." *Marine Corps Gazette* (July 2004): 36.
- Krulak, Gen. Charles C. "The Strategic Corporal: Leadership in the Three Block War," *Marines Magazine*, January 1999, accessed 26 October 2005, available from http://www.au.af.mil/au/awc/awcgate/usmc/strategic_corporal.htm; Internet.
- _____. "Cultivating Intuitive Decisionmaking," *Marine Corps Gazette*, May 1999, accessed 26 October 2005, available from http://www.au.af.mil/au/awc/awcgate/usmc/cultivating_intuitive_d-m.htm; Internet.

- Leahy, Peter Lieutenant General. "Towards the Hardened and Networked Army." *Australian Army Journal* (Winter 2004): 27-36.
- _____. "The Army in the Air: Developing Land-Air Operations for a Seamless Force." *Australian Army Journal* (Autumn 2005): 19-29.
- Liddy, Linda. "The Strategic Corporal: Some Requirements in Training and Education." *Australian Army Journal* (Autumn 2005): 139-148.
- Manwaring, Max G. *Internal Wars: Rethinking Problem and Response*. Carlisle, PA: Strategic Studies Institute, 2001.
- Matsumura, John, et al. *Exploring Advanced Technologies for the Future Combat Systems Program*. Santa Monica, CA: RAND, 2002.
- McMaster, H.R. *Crack in the Foundation: Defense Transformation and the Underlying Assumption of Dominant Knowledge in Future War*. Carlisle, PA: Center for Strategic Leadership, November 2003.
- Nelson, Lieutenant Colonel John D., *Swiftly Defeat the Efforts: Then What? The "New American Way of War" and Transitioning Decisive Combat to Post-Conflict Stabilization*. Carlisle, PA: Center for Strategic Leadership, July 2004.
- Sargent, Ron Major, US Army. "Strategic Scouts for Strategic Corporals." *Military Review* (March-April 2005): 12-17.
- Schmidle, Robert E., BGen. "Distributed Operations: From the Sea." *Marine Corps Gazette* (July 2004): 37-41.
- Wong, Leonard. *Developing Adaptive Leaders: The Crucible Experience of Operation Iraqi Freedom*. Carlisle, PA: Strategic Studies Institute, July 2004.

Endnotes:

¹ Adapted from Michael Evans, “From Kadesh to Kandahar: Military Theory and the Future of War,” *Naval War College Review* (Summer 2003, Vol LVI, No.3): 146.

² Professional mastery can be defined as: the ability to perform given competencies, the awareness of why they are being performed, the flexibility to perform them in a range of circumstances, and the self-confidence to apply them in conditions of risk and ambiguity. See Lieutenant Colonel Greg de Somer and Major David Schmidtchen, *Professional Mastery: The Human Dimension of Warfighting Capability for the Army-After-Next*, Land Warfare Studies Centre Working Paper No. 107 (Duntroon, ACT: Land Warfare Studies Centre, October 1999), 3. For the purpose of this paper, the term “Strategic Corporal” should not be taken literally, but rather refers to the idea that the tactical actions of junior leaders (squad leader/section commander to company commander) can have both planned and unforeseen strategic effects. Although it is true that this has always been the case throughout the history of warfare, today and in the future, the prevalence of media on the battlefield and the speed by which information is shared has meant that decisions made by junior leaders have increased potential to affect the outcome of the conflict at hand. For the literal translation of “Strategic Corporal”, and the article responsible for popularizing the term, see General Charles C. Krulak, “The Strategic Corporal: Leadership in the three Block War,” *Marines Magazine* (January 1999), accessed 26 October 2005, available from http://www.au.af.mil/au/awc/awcgate/usmc/strategic_corporal.htm; Internet.

³ For a sample of those who argue that the information revolution will lift the fog of war and permit US forces to achieve near-certainty in future military operations, see Admiral Bill Owens with Ed Offley, *Lifting the Fog of War* (New York: Farrar, Straus, and Giroux, 2000). For the US Department of Defense party line on the same theme, see *Military Transformation: A Strategic Approach*, Office of the Secretary of Defense, accessed 20 October 2005, available from http://www.oft.osd.mil/library/library_files/document_297_MT_StrategyDoc1.pdf. Internet. Two recommended critiques of this belief are: H.R. McMaster, *Crack in the Foundation: Defense Transformation and the Underlying Assumption of Dominant Knowledge in Future War* (Carlisle, PA: Center for Strategic Leadership, November 2003) and Colin S. Gray, *Transformation and Strategic Surprise* (Carlisle, PA: Strategic Studies Institute, April 2005).

⁴ For an argument that the US should develop a specialist, reconstruction and stabilization force to complement a “decisive operations” force, see Hans Binnendijk and Stuart E. Johnson, ed., *Transforming for Stabilization and Reconstruction Operations* (Washington, D.C.: National Defense University Press, 2004).

⁵ In effect, the “three block war” concept, first articulated in 1999 by the Commandant of the Marine Corps at the time, General Charles Krulak, will remain valid into the near future. See Krulak, “The Strategic Corporal: Leadership in the Three Block War.”

⁶ Complexity will manifest itself in physical, human, and informational terrain. Complex physical terrain—urban areas or restricted terrain such as jungles or mountains—will maximize the distortion effect such terrain has on surveillance and targeting systems. Complex human terrain will be characterized by the situation where numerous population

groups, each with their own ethno-linguistic traits, political factions, tribal allegiances and customs, religions, and ideologies coexist in the same physical space. Complex informational terrain exists when multiple sources or transmission paths for communications, data, or information, including news media, exist, creating enormous challenges for the control of information. See *Complex Warfighting Edition – Two (Working Draft)*, Australian Army Future Land Operational Concept, correct as at 30 March 2005, 7.

⁷ *Complex Warfighting*, 5. An added dimension that must be anticipated is the calculated use of non-violent actors as a critical part of tactical actions. Opponents to the US and her allies can use crowds, protestors, the media, the internet, and other non-violent methods to create tactical dilemmas and achieve strategic effect; see Thomas X. Hammes, “Insurgency: Modern Warfare Evolves into a Fourth Generation,” *Strategic Forum* (January 2005), accessed 15 October 2005, available from <http://www.ndu.edu/inss/strforum/SF214/SF214.pdf>, Internet.

⁸ *Complex Warfighting*, 8.

⁹ Michael Evans, “Clausewitz’s Chameleon: Military Theory and the Future of War,” *Quadrant*, Vol XLVI, No.11 (November 2002): 8, accessed 26 October 2005, available from <http://www.quadrant.org.au/php/phpprint.php>, Internet.

¹⁰ Clausewitz, *On War*, 88.

¹¹ Evans, “Clausewitz’s Chameleon,” 8.

¹² *Small Wars Manual: United States Marine Corps 1940* (Manhattan, Kansas: Sunflower University Press, 1988), 1-9-15.

¹³ This concept forms the basis for two commentators who argue that democracies are ill-suited to winning small wars: see Major Robert M. Cassidy, “Why Great Powers Fight Small Wars Badly,” *Military Review* (September-October 2000), who argues that great powers embrace a “big-war paradigm” founded on the concept of decisive battle, which is ill-suited to winning small wars; also Gil Merom, *How Democracies Lose Small Wars* (Cambridge, UK: Cambridge University Press, 2003), who argues that a democratic nation’s domestic political structure and institutional composition do not support a protracted war.

¹⁴ Brigadier N.R.F. Aylwin-Foster, *Operation Iraqi Freedom Phase 4: The Watershed the US Army Still Needs to Recognise?* (Unpublished paper, Royal College of Defence Studies, 2005 course, copy in author’s possession), 22.

¹⁵ As John Nagle points out in a recent comparison of British and American institutional approaches to conducting counterinsurgency operations, it was “this mind-set, the idea that the US Army could defeat any enemy on any battlefield given enough firepower and the freedom to apply it indiscriminately, that precluded organizational learning on counterinsurgency during the Vietnam War” and contributed significantly to an American defeat. See John A. Nagle, *Learning to Eat Soup With a Knife: Counterinsurgency Lessons From Malaya and Vietnam* (Chicago: The University of Chicago Press, 2002), 203.

¹⁶ Evans, “From Kadesh to Kandahar,” 139.

¹⁷ *Small Wars Manual*, 1-10-18.

¹⁸ Max G. Manwaring, *Internal Wars: Rethinking Problem and Response* (Carlisle, PA: Strategic Studies Institute, 2001), 19. In addition, for the central role of legitimacy in

psychologically dislocating insurgents, see Robert Thompson, *Defeating Communist Insurgency*, 52.

¹⁹ Evans, "From Kadesh to Kandahar," 143.

²⁰ Kenneth Allard, "Somalia Operations: Lessons Learned," *Institute for Strategic Studies*, accessed on 14 November 2005, available from http://www.au.af.mil/au/awc/awcgate/ndu/allard_somalia/allardch2.html, Internet.

²¹ Globalization can be defined as a process of increasing connectivity resulting in the dispersion and democratization of technology, information, and finance. This definition is a composite of definitions of globalization offered by Thomas L. Friedman, *The Lexus and the Olive Tree: Understanding Globalization* (New York: Anchor Books, 1999), 9 and LTC Antulio J. Echevarria II, *Globalization and the Nature of War* (Carlisle, PA: Strategic Studies Institute, March 2003), 3 and footnote 1.

²² *Complex Warfighting*, 6.

²³ That the skill set required for small wars compared with high intensity conventional wars is different is highlighted by a US Army General's recent assertion that it was unreasonable and impractical to expect front-line soldiers, given their training and pre-eminent warfighting role, to develop the levels of subtlety or master the wider range of skills predicated by the hearts and minds campaign. See Aylwin-Foster, *Operation Iraqi Freedom Phase 4: The Watershed the US Army Still Needs to Recognise?*, 8.

²⁴ H.R. McMaster, *Crack in the Foundation*, 15.

²⁵ Clausewitz, *On War*, 85.

²⁶ *Ibid.*, 119.

²⁷ Alan Beyerchen, "Clausewitz, Nonlinearity, and the Unpredictability of War," *International Security* (Winter 1992/93), 70.

²⁸ Les Brownlee and General Peter J. Schoomaker, "Serving a Nation at War: A Campaign Quality Army with Joint and Expeditionary Capabilities," *Parameters* (Summer 2004), 18.

²⁹ *Complex Warfighting*, 8.

³⁰ Christopher P. Gehler, *Agile Leaders, Agile Institutions: Educating Adaptive and Innovative Leaders for Today and Tomorrow* (Carlisle, PA: Strategic Studies Institute, August 2005), 11.

³¹ H.R. McMaster, *Crack in the Foundation*, 69.

³² Major Ron Sargent, "Strategic Scouts for Strategic Corporals," *Military Review* (March-April 2005), 12.

³³ This develops a theme raised by Linda Liddy in "The Strategic Corporal: Some Requirements in Training and Education," *Australian Army Journal* (Autumn 2005): 141.

³⁴ Brigadier General David A. Fastabend and Robert H. Simpson, "Adapt or Die: The Imperative for a Culture of Innovation in the United States Army," *Army* (Vol. 54, February 2004): 1-12.

³⁵ This is an adaption of a quote from Williamson Murray, who argues that "any approach to military education that encourages changes in cultural values and fosters intellectual curiosity would demand more than a better school system: it demands that professional military education remains a central concern *throughout the entire career of an officer*. See Williamson Murray, "Innovation: Past and Future," in Williamson Murray and Allan

R. Millett, Ed., *Military Innovation in the Interwar Period* (Cambridge: Cambridge University Press, 1996), 327.

³⁶ H.R. McMaster, *Crack in the Foundation*, 16.

³⁷ Gary Klein, *Sources of Power: How People Make Decisions* (Cambridge, MA: The MIT Press, 1998), 125-143.

³⁸ Obviously, in the case of Platoon Leaders/Platoon Commanders, they are going to assume command with virtually no professional experience (unless they are prior enlisted), and are likely to be relatively young in age. Arguably, this inexperience can be off-set by more experienced squad leaders/section commanders and platoon sergeants, who can provide mature advice and guidance because they are sufficiently experienced.

³⁹ Lieutenant General Peter Leahy, "The Army in the Air: Developing Land-Air Operations for a Seamless Force," *Australian Army Journal* (Autumn 2005): 22-23.

⁴⁰ Leadership provides the willingness to take decisive action, and assumes risk in doing so. Initiative instills in commanders and subordinates the desire for responsibility, and trust enables commanders and subordinates to understand the thought processes of others and so provide a guide for unified action. See Australian Land Warfare Doctrine 1-0, *Fundamentals of Land Warfare (Victoria: Army Doctrine Centre, 2002)*, 68.

⁴¹ Williamson Murray cites the pre-WWII Germans as a "learning organization" because "within German culture there was honest study and reflection as to the possibilities open to further development . . . In all cases they continued to carry out ruthless, critical examinations of what had occurred in the field and as a result, they *recognized and learned from* mistakes." [emphasis in original] See Williamson Murray, "Innovation: Past and Future," 314. This attitude tends not to be readily apparent in Western militaries today, especially when careers may be made or lost based on annual reporting that emphasizes a zero-defect mentality.

⁴² *Ibid.*, 326-327.

⁴³ For Distributed Operations see Headquarters United States Marine Corps, *A Concept for Distributed Operations* (Washington D.C.: Department of the Navy, 25 April 2005), accessed 26 October 2005, available from <http://www.mcwl.quantico.usmc.mil/A%20Concept%20for%20Distributed%20Operations%20-%20Final%20CMC%20signed%20co.pdf>; Internet,

LtGen Edward Hanlon, Jr., "Distributed Operations: The Time is Now," *Marine Corps Gazette* (July 2004): 36, and BGen Robert E. Schmidle, "Distributed Operations: From the Sea," *Marine Corps Gazette* (July 2004): 37. For a description of the principles of Rapid Decisive Operations see Harlan Ulman et al., *Shock and Awe: Achieving Rapid Dominance* (Washington, D.C.: National Defense University, 1996), 16. Lieutenant Colonel John D. Nelson, US Army, argues the concept of Rapid Decisive Operations, which emphasizes rapid maneuver and precision firepower to achieve quick and decisive victory with minimum casualties, has influenced the pattern and conduct of Operation Allied Force (Kosovo), Operation Enduring Freedom (Afghanistan), and Operation Iraqi Freedom (Iraq); however, the concept is fundamentally flawed because it fails to create a winning philosophy for maintaining the peace once the initial victory has been achieved. See Lieutenant Colonel John D. Nelson, *Swiftly Defeat the Efforts: Then What? The "New American Way of War" and Transitioning Decisive Combat to Post-Conflict Stabilization* (Carlisle, PA: Center for Strategic Leadership, July 2004).

⁴⁴ H.R. McMaster, “Crack in the Foundation,” 1.

⁴⁵ Quoted from FM1 *The Army* in H.R. McMaster, “Crack in the Foundation,” 42.

⁴⁶ John Matsumura, et al., *Exploring Advanced Technologies for the Future Combat Systems Program* (Santa Monica, CA: RAND, 2002), 59.

⁴⁷ Clausewitz, *On War*, 573.

⁴⁸ Adapted from a theme developed by Jeffrey Grey, “Professional Military Education and the ADF,” *Defender* (Spring 2004): 28.

⁴⁹ Major General Robert H. Scales, *Yellow Smoke: The Future of Land Warfare of America's Military* (New York: Rowman and Littlefield Publishers, Inc., 2003), 90. We are witnessing the effects of this on Operation Iraqi Freedom today, where “geographical dispersion, changing tactical and strategic situations, and a volatile environment prevented higher echelon commanders from developing plans with specific guidance for junior officers carrying out missions. Junior officers became experts on the situation, not higher headquarters.” See Leonard Wong, *Developing Adaptive Leaders: The Crucible Experience of Operation Iraqi Freedom* (Carlisle, PA: Strategic Studies Institute, July 2004), 13.