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Appleget, Jeffrey; Kline, Jeffrey; Wirtz, James J.

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Do Wargames Impact Deterrence?

Jeffrey Appleget, Jeffrey Kline and James J. Wirtz

Diplomats and senior officers generally assume that exercises conducted by both land and maritime forces can influence the behavior of potential adversaries in ways that bolster deterrent or compellent threats. Recent events support this assumption. In 2015, for instance, North Korean officials made a series of verbal threats toward the United States as Ulchi Freedom Guardian, a U.S.-South Korean exercise, unfolded. Pyongyang apparently interpreted the exercise to be a credible threat.¹ The communication that occurs via exercises can also be iterative. The North Atlantic Treaty Organization's (NATO) exercise Steadfast Jazz 2013, which tested NATO reaction forces, and an invigorated 'BALTOPS' (Baltic Operations) exercise in 2015 could be interpreted as responses to Russia's Zapad 2009 and 2013 exercises, which demonstrated Russia's ability to mobilize forces to attack the Baltic States. Although competing military exercises might fuel spirals of hostility, or lead to inadvertent escalation as troop movements and communications are interpreted as a real attack,² they are probably just as likely to produce a more stable international situation as competitors demonstrate military capability, coalition coordination, logistics capacity and preparedness to counter certain aggressive actions. Military exercises might even be a way to

1 'North Korea threatens to attack U.S.,' Report by Kevin Conlon, CNN, 15 August 2015, <http://www.cnn.com/2015/08/15/world/north-korea-threats/>

2 For *Able Archer*, see the chapters in this volume by Diego Ruiz Palmer and Beatrice Heuser, and also Raymond L. Garthoff, 'Soviet Leaders, Soviet Intelligence, and Changing Views of the United States, 1965-1991,' in Paul Maddess (ed), *Image of the Enemy: Intelligence Analysis of Adversaries Since 1945*, Washington, D.C., Georgetown University Press, 2015, pp. 44-45; and Nate Jones (editor), *Able Archer 83: The Secret History of the NATO Exercise that Almost Triggered Nuclear War*, New York, The New Press, 2016.

demonstrate the will to execute threats if deterrence should fail by working out the details necessary to turn ‘threats’ into the reality of military action. Military exercises involving actual forces serve as an important means of communication on the world stage.

It remains uncertain, however, whether wargaming – tabletop exercises, computer simulations, command and control evolutions involving human decisions but not the actual movement of forces – can have a similar effect as the movement of troops on the ground or ships at sea. In other words, can an overt wargame, or a secret wargame purposely leaked, or the details of a wargame revealed through espionage communicate potential capability or commitment to an adversary’s leadership?³ Thus, the question we pose is if the contents of wargames are purposively made known, can they bolster deterrent or compellent threats? Wargames are an important part of defense planning around the world, but as far as we can tell, scholars and senior defense officials have never devoted much attention to estimating their impact on the behavior or planning efforts of likely opponents.⁴ Similarly, virtually nothing has been written about if or how wargaming shapes world politics or the general strategic setting. Little effort has been devoted to determine if wargames can be used to strengthen deterrence or if they can play a role in strategic communication efforts.

To better assess if and how wargaming influences opponents, we shall first briefly trace the evolution of wargaming and identify relevant definitions of what constitutes a wargame. We shall then identify the theoretical basis for suggesting that wargames might in fact be able to shape the international environment and the behavior and expectations of

³ See Beatrice Heuser’s chapter in this book on the assumption of Western planners that due to wide-spread intelligence gathering, Moscow had full information about and could not misunderstand Western intentions, which were purely defensive.

⁴ That estimating the impact of wargaming has attracted little scholarly attention might be a facet of a larger problem. According to Keren Yarhi-Milo, ‘... little scholarship exists to identify which indicators leaders and the state’s intelligence apparatus tasked with estimating threats use to assess intentions,’ see Keren Yarhi-Milo, ‘In the Eye of the Beholder: How Leaders and Intelligence Communities Assess the Intentions of Adversaries,’ *International Security*, Vol. 39, No. 1 (Summer 2013), p. 7.

potential opponents. The paper then offers a brief survey of some notable instances in which wargames seemed to influence not only policymakers' perceptions, but also the course of subsequent international events.

What is a Wargame?

The first use of inanimate objects like rocks and pebbles to represent men, animals and machines in conflict is lost in the mists of time, but it appears that gaming emerged alongside many activities associated with the rise of society and government. Miniature figures and playing boards, for instance, have been found in Egyptian tombs and other archeological excavations.⁵ An early conflict game developed in China, *Wei Hai*, and its Japanese daughter *Go*, as well as the Indian game *Charturanga* and its daughter modern Chess, are thought to have been used for both entertainment and for introducing players to the role of maneuver and strategy in war.⁶ In the 17th century, the Germans increased the complexity and movement in chess, creating the *Königsspiel*, or 'King's Game.' Over the next two hundred years, they refined the game in terms of modeling terrain, differentiating unit capabilities, and devising more precise and standardized adjudication methods. By the 19th century, wargaming became an accepted part of an officer's education as well as an instrument for assessing battle plans, new concepts and emerging technologies. With the development of computers and the emergence of modern operations research, wargames now offer increasingly sophisticated and detailed depictions of the tactical, operational and strategic components of battle and more mathematically rigorous methods to adjudicate game outcomes. Nevertheless, the most valuable contribution made by wargames to both education and analysis has changed little since the *Königsspiel*. Wargames allow humans to make real-time decisions within the confines of a specific and controlled scenario, decisions that can then be assessed in terms of

5 Alfred H. Hausrath, *Venture Simulation in War, Business, and Politics*, New York, McGraw-Hill. 1971, p. 3; and Martin van Creveld, *Wargames from Gladiators to Gigabytes*, Cambridge, Cambridge University Press, 2013.

6 Peter P. Perla, *The Art of Wargaming*, Annapolis, MD, United States Naval Institute Press, 1990, p. 16.

their ability to contribute to a desired end state.

Various definitions of the term ‘wargame’ have been suggested. James Dunnigan, for instance, defines a wargame as ‘a combination of game, history and science.’⁷ In the most comprehensive use of the term, a wargame can be any simulative environment that represents conflict between two or more entities and involves real time human decision making. Defined in this manner, actual field exercises may be considered wargames, which makes these sort of broad definitions of wargame unsuited for use in this paper.⁸ Thus, for our purposes, Peter Perla’s more restrictive definition of wargame makes a distinction that is key to assessing the impact of wargames on world politics. According to Perla, a wargame is ‘...a warfare model or simulation whose operation does not involve the activities of actual military forces, and whose sequence of events affects, and is, in turn, affected by the decisions made by players representing the opposing sides.’⁹ One could also add that wargames differ from military exercises in that games, *ceteris paribus*, involve fewer resources and overt risks (increased risk of inadvertent escalation, operational accidents, reductions in future force readiness, etc.) when compared to the movement of actual forces. Additionally, wargames allow participants to manipulate notional weapons, units and operational methods that are under development or might be potentially developed. They can simulate forces and fighting methods that do not actually exist in an effort to test their responsiveness to estimated future threats.

When defined in this matter, wargaming, which is not necessarily bounded by today’s material or operational realities, could communicate a variety of accurate or *deceptive* messages to potential opponents. Wargaming could be used to signal interest in nascent technologies and operational concepts, while providing insight into the expectations behind these emerging systems and concepts. For instance, a wargame in

⁷ James F. Dunnigan, *The Complete Wargames Handbook: how to play, design and find them*, New York, William Morrow, 1992, p. 13.

⁸ Hausrath, *ibid*, p8.

⁹ Perla, *ibid*, p164.

which blue extensively relied upon notional precision-guided hypersonic lifting bodies targeted against red's notional present or future mobile missiles would not only suggest the emergence of this new technology, but would also offer insight into how blue intended to incorporate lifting bodies into existing operational concepts and war plans. The same game, however, could also be used to misdirect opponents onto unproductive paths: even if there were no hypersonic lifting bodies under development, news of such a game might cause red to divert resources into programs to counter this potential threat to its systems. Wargames also could reveal one's strengths or identify weaknesses in the opponent's forces or operational concepts, information that should serve to bolster deterrence. Alternatively, they might also reveal one's weaknesses, the opponent's strengths, poor intelligence collection and analysis or faulty strategic assumptions.

Today wargames are used by many militaries for training, plan assessment and evaluation of new concepts and technologies. Wargaming for training and evaluation of new concepts probably are the best candidates to 'signal' potential adversaries. For example, announcing that a series of wargames concerning countering Russian aggression in the Baltics will be conducted at the Naval War College will educate players on the Baltics' unique maritime environment, geo-political map and regional orders of battle. One might also reasonably expect, however, that this type of game would suggest to all concerned that the U.S. Navy is increasingly interested in the challenges of conducting operations in the Baltic. Likewise, publishing results of a wargame to assess a new undersea technology may convey to an emerging naval power that new technologies are being considered to counter their forces or operational concepts.

Would Overt Games Communicate a Message?

The literature on how intelligence analysts, officer and officials perceive and assess adversaries' behavior is both vast and complex. Human cognition, organizational behavior and domestic politics combine in

myriad ways to shape what information people attend to and how they interpret this information. Further complicating matters is the fact that decision-makers are generally presented with conflicting information: some indicators signal benign intentions while others are profoundly disturbing, making it difficult to generate an overall assessment of an adversary's intentions or the dominant trends in a given situation. The potential for denial and deception also forces all concerned to question the validity of information volunteered by an adversary, while it is also safe to assume that opponents are withholding a good deal of information from scrutiny. Given the cacophony of important and extraneous event data, information and opinion that animates world politics, why would wargaming be interpreted by an opponent as a valid indicator of capabilities, interests or intentions?

Although predictions are mixed, on balance, wargaming should serve as an effective signaling tool towards adversaries. Three theories, which address how adversaries judge opponents' intentions, address this issue. First, observers judge the behavior or actions of others based on the costs incurred in conducting that behavior or action.¹⁰ According to Thomas Schelling, 'words are cheap [and] not inherently credible when they emanate from an adversary ... Actions ... prove something; significant actions usually incur some cost or risk, and carry some evidence of their own credibility.'¹¹ The idea that 'cheap talk' should be ignored is not particularly controversial, but do wargames constitute 'cheap talk' or do they entail sufficient costs to actually be seen as a credible indicator of intentions and interests?

The notion of cost is relative. Admittedly, wargames can be undertaken at significantly reduced costs when compared to military alerts or exercises. Nevertheless, they can require the expenditure of resources that are actually in short supply. Significant wargaming activity – games

10 Robert Jervis, *The Logic of Images in International Relations*, New York, Columbia University Press, 1989; and James D. Fearon, 'Signaling Foreign Policy Interests: Tying Hands versus Sinking Costs,' *Journal of Conflict Resolution*, Vol. 14, No. 1, February 1997, pp. 68-90.

11 Thomas Schelling, *Arms and Influence*, New Haven, Yale University Press, 1966, p. 150.

involving scores or even hundreds of individuals – do entail significant financial costs, but they also involve significant opportunity costs. In other words, wargaming facilities can only conduct a limited number of games; topic choices become critical because potential topics for investigation outnumber available resources. Wargaming might not cost much compared to a major weapons program, but they do cost a great deal when it comes to utilization of the specialized resources optimized for wargaming. Governments and militaries do indeed put their wargaming money where their mouth is when it comes to selecting one potential wargaming scenario over another.

The risks that accompany wargaming also can be seen as a potential cost that should be salient to observers. Wargamers run the risk of exposing weaknesses in their own organization or their failure to comprehend accurately an opponent's order of battle or operational concepts. Wargames actually pose the potential of revealing more about one's own intentions and capabilities than actually intended, including estimates of the intentions and capabilities of the opponent. In fact, the inherent risk (i.e., potential cost) entailed in a wargame is what makes it an especially effective tool when it comes to efforts at denial and deception. Additionally, gaming 'bogus' capabilities and scenarios to deceive opponents about future intentions is possible, but also creates the risk of communicating the same bogus message to one's own force, leading to the perception that deceptive plans and nascent capabilities are the real McCoy. These risks, however, are what make wargames salient in the minds of an opponent – they assume that these risks (costs) would only be assumed if the benefits to be gained by the gamer were important.

The second way that observers tend to judge intentions is by monitoring capabilities, which tend to be more stable than costs entailed in various foreign policy, operational or even 'gaming' initiatives. In other words, force structure gives a good indicator of intentions because it reflects sustained political and bureaucratic interests and foreign policy intentions. It reflects the willingness to sustain costs over time, i.e., commitment. Changes in capabilities also tend to be interpreted in rather obvious ways:

growth in force structure, especially in terms of systems deemed offensive in nature, is considered a negative development, while force reductions are seen as an indicator of more benign intent. According to Charles Glaser, a 'state's military buildup can change the adversary's beliefs about the state's motives, convincing the adversary that the state is inherently more dangerous than it had previously believed.'¹² The possibility of gaining insight into future capabilities, combined with the chance of gaining insight into an opponent's mindset, would be an important reason why opposing intelligence organizations would be interested in monitoring the subjects and contents of wargames.¹³ In other words, wargames might just offer an insight into changes in current capabilities, or potential capabilities – factors that are often depicted as important indicators of an opponent's intentions.

A third reason why wargames might serve as an effective means of communication in world politics is because they might be able to cut through the noise of everyday events and appear quite vivid to observers. According to Keren Yarhi-Milo, vividness or the perception of heightened salience and relevance of information is a key factor when it comes to understanding why some types of information are deemed important and credible by observers. Vividness, in Yarhi-Milo's view, often is the product of direct personal experience: 'decisionmakers will be reluctant to rely on evidence that is abstract, colorless, objective, or less tangible. ... this kind of information is not nearly as engaging as the vivid, salient, and often emotionally laded personal responses that leaders take away from meeting with their opponents.'¹⁴ Thus, a conversation with a foreign leader will be far more influential than the perusal of some spreadsheet. Yarhi-Milo's selective-attention thesis aligns well with the general thrust of contemporary cognitive psychology, but would news about wargames actually appear as vivid information to analysts and policy makers?

12 Charles K. Glaser, 'The Security Dilemma Revisited,' *World Politics*, Vol. 50, No.1, October 1997, p. 178.

13 Yarhi-Milo has made the case that at least the U.S. intelligence community monitored opponent's capabilities as a way to divine opponent's intentions, see Yarhi-Milo, pp. 26-28.

14 Yarhi-Milo, p. 13.

Several aspects of wargames might actually increase their salience to analysts and officials. First, whether or not information is available in open sources or purloined through espionage, information about wargames is vivid because it potentially provides insights into an opponent's state of mind, insights that are not intentionally provided by the side conducting the wargame. In other words, the whole is greater than the sum of its parts when it comes to information about the scope and nature of a wargame – a fact that is likely to attract the attention of observers. A wargame can also synthesize in one event much information about new equipment, tactics or operations, information that would otherwise have to be pieced together by an opponent from a myriad of sources at great expense and with significant uncertainty. Second, wargames are inherently interesting because of the potential they have to reveal vulnerabilities or miscalculations of the side conducting the wargame. Indeed, if the gamers' vulnerabilities or miscalculations are revealed, they are likely to spark considerable attention among observers. Third, wargames that play on the sensitivities of observers are likely to be noticed regardless of the actual content of the game itself. In other words, if observers are concerned about a specific scenario, or geographic region, or emerging technology, games incorporating these factors are likely to be noticed.

Survey of Wargames and their Impact

Although it would be gratifying to report that wargames consistently have an impact on opponents, especially opponents' perceptions of extant and potential deterrent threats, the historical record is ambiguous. On the one hand, the record supports the theoretical expectation that wargames should be salient to opponents. For instance, several of the wargames surveyed actually reveal significant shortcomings in the gaming side's defense planning and posture, findings that would be of significant interest to opponents observing the wargame. On the other hand, lessons offered by wargames are not only missed by opponents, but also by the side actually conducting the wargame. Wargames also produce second

and third order effects. Some of these effects bolster deterrence, while others undermine deterrence efforts. Nevertheless, there is no clear historical evidence that wargames have helped deter specific behavior. The following examples demonstrate how wargaming has influenced friendly and adversary planning and actions.

The U.S. Navy's Interwar Experience

A frequently referenced example of how a series of wargames affected actual theater strategy and operations is the United States Naval War College gaming that occurred during the interwar years. The U.S. Navy's planning efforts for war in the Pacific against Japan was known as War Plan Orange (also Navy WPL-13, Fleet Plan 0-1, Rainbow plan, etc.). Various planning staffs had responsibility for developing and updating this plan over thirty years before the attack at Pearl Harbor.¹⁵ In the early years, the Naval War College was directly involved in the planning effort, using students and faculty as a planning staff. Wargaming was extensively used to explore operations, communications, logistics, tactical engagements and new technologies during this period and continued to inform planning efforts when responsibility for the war plan moved to other staffs. After years of games played by students attending the War College, generations of naval officers became familiar with the geographic challenges, logistic distances, enemy capabilities and island topography which then influenced the operational planning efforts prior to and during World War Two. The strategic plan carried out by Admiral Nimitz (himself a Naval War College graduate) in the central Pacific paralleled the same strategies explored during the inter-war period. Admiral Nimitz credited the War College's gaming effort in this way: 'The war with Japan had been reenacted in the game rooms at the Naval War College by so many people, and in so many ways, that nothing that happened during the war was a surprise ... except the kamikaze tactics toward the end of

¹⁵ For a complete review of War Plan Orange's maturity see Edward Miller, *War Plan Orange: the Strategy to Defeat Japan, 1897 – 1945*, Annapolis, Maryland, Naval Institute Press, 1991.

the war.¹⁶ This comment has reverberated over the decades, supplying the U.S. Navy's current wargaming efforts in Newport, Rhode Island with an enviable cachet.

Did the Japanese notice these wargames? It would appear that the answer is yes, but the answer is not as clear cut as we would like because the gaming effort itself seems to have influenced the scope and nature of U.S. Navy exercises. During the United States' Grand Joint Army and Navy exercises in February of 1932, Admiral Harry E. Yarnell, an airpower proponent who took on the role the opposing air force commander, approached Oahu from the north with the aircraft carriers *Saratoga* and *Lexington*. His mission was to attack U.S. Army and Navy forces on and near the island in advance of a land assault. He selected his approach based on the poor weather north of the Hawaiian Islands to mask his task force's movement and the day to attack, Sunday, to catch the defending forces in a position when they would be least likely to detect and repel an air strike. After sailing this carrier task force towards Pearl Harbor through heavy seas, in radio silence and with no running lights, Yarnell reached his launch position 60 nautical miles northeast of Oahu. He then launched 152 planes, which attacked airfields, depots, headquarters and ships at anchor. Yarnell's success was hotly debated immediately after the exercise, but his tactics did not serve as a warning for future defenses.¹⁷ The game influenced exercise thus served to reveal weaknesses in the U.S. ability to protect the Hawaiian islands from air assault, but the lessons from the game were not fully utilized by the defenders of Pearl Harbor.

The potential lessons offered by the 1932 exercise were not lost on Japanese observers who were invited to witness the evolution. Their reports are credited with influencing the 1936 Japanese War College's report *The Study of Strategy and Tactics in Operations against the United States*, which suggested that the Imperial Navy should open hostilities with the United

16 U.S. Naval War College website, [https://www.usnwc.edu/Academics/Catalog/RightsideLinks-\(1\)/2009-2010.aspx](https://www.usnwc.edu/Academics/Catalog/RightsideLinks-(1)/2009-2010.aspx)

17 Thomas Fleming, 'February 7, 1932—A date that would live in....amnesia,' *American Heritage*, July/August 2001, Vol. 55, Issue 5.

States by launching a surprise air attack on Pearl Harbor.¹⁸ Ironically, once the decision for war had been reached, the Imperial Navy conducted a series of wargames in the form of table top exercises to support the final plans for the attack on Pearl Harbor. Starting in mid-September 1941, these games included individuals from the actual commands that would eventually carry out those attacks. These games explored optimal force structure and damage estimates for Japanese and U.S. forces. The results of these games influenced the approach routes of attacking units and the decision to employ six aircraft carriers in the Pearl Harbor raid.¹⁹ U.S. intelligence analysts and policymakers never became aware of these last minute Japanese gaming efforts because they were obviously subjected to the strictest security measures.

Star Wars & The Military Technical Revolution

In recent literature related to the end of the Cold War, there appears to be a consensus among scholars that Soviet leaders became obsessed with a surge in U.S. information age technologies that were beginning to come on line in the 1980s, while Western observers became concerned about a ‘Military Technical Revolution’ underway inside the Warsaw Pact. For instance, the Strategic Defense Initiative introduced by the Ronald Reagan administration in 1983, often referred to as ‘Star Wars,’ was of great concern to Soviet officials.²⁰ What is especially significant, however, is that Star Wars always remained a ‘notional’ capability. Depictions of the concepts, operations and functioning of the system often took the form of simulations, artists’ renditions or thought experiments that illustrated

18 Alan Armstrong, *Preemptive Strike: The Secret Plan that Would Have Prevented The Attack on Pearl Harbor*, Guilford Connecticut, The Lyons Press, 2006, p. 70.

19 Alan D. Zimm, *Attack on Pearl Harbor: Strategy, Combat, Myths, Deceptions*, Havertown, PA, Casemate Publishers, 2011, pp. 71 – 82.

20 Dima Adamsky, *The Culture of Military Innovation: The Impact of Cultural Factors on the Revolution in Military Affairs in Russia, the US and Israel*, Stanford, CA, Stanford University Press, 2010. As Raymond Garthoff notes, however, a NATO maritime exercise partially conducted in the Barents Sea in the early 1980s and the infamous 1983 *Able Archer* NATO Nuclear Command and Control exercise seemed to create a palpable fear in Moscow – see Beatrice Heuser’s chapter in this book

how the system might work; that is, if it was ever developed. In effect, what Soviet observers understood about this program was mostly gleaned from literature, simulations and games, not from battlefield exercises or actual use in combat. The message they took away from this ‘simulated’ American leap forward in the Cold War arms race was that the time had come to put an end to the arms competition with the United States.²¹

Similarly, by the mid-1970s, the concept of a Military Technical Revolution was evident to Western observers because of intelligence reports supplied by Polish, Soviet and Afghan agents. According to Diego Ruiz Palmer, ‘the clandestine contribution of [Polish Colonel Ryzard] Kuklinski on Warsaw pact operational concepts, command structure, and exercises in particular, was of an unprecedented and unparalleled quality and duration.’²² Classified reports concerning a series of Soviet command post and field training exercises beginning in 1977 through 1983 demonstrated that the Warsaw Pact was attempting to operationalize the ‘Military Technical Revolution.’ Indeed, a comment made about the problems uncovered by *Zapad 77* command exercise, held in 1977, by Marshal Dmitri Ustinov, the Soviet Defense Minister, highlighted the three elements that came to characterize the American concept of the Revolution in Military Affairs: ‘It is necessary to ponder well what else should be done from an *organizational*, *operational*, and *technical* standpoint to successfully resolve them [emphasis added].’²³ By 1980, the Office of Net Assessment (ONA) in the U.S. Department of Defense was aware that RMA-like developments were underway in both alliances. According to Palmer, ‘this ever deeper understanding of the interactive relationships between conceptual and technological

21 Votek Mastny, ‘The Cold War Arms Race: Forces Beyond the Superpowers,’ in Thomas Mahnken, Joseph Maiolo, and David Stevenson (eds.) *Arms Races in International Politics: From the Nineteenth to the Twenty-First Century*, Oxford, Oxford University Press, 2016, pp. 196-197.

22 Diego A. Ruiz Palmer, ‘The NATO-Warsaw Pact Competition in the 1970s and 1980s’ A Revolution in Military Affairs in the Making or the End of a Strategic Age?’ *Cold War History*, Vol. 14, No. 4 2014, p. 546.

23 Ustinov quoted in *Materials of the Critique of the Operational-Strategic Command-Staff Exercise ZAPAD-77*, TS #788301, 13 October 1978, classified Top Secret, Langley, VA, Central Intelligence Agency, CIA FOIA Electronic Library, declassified and released to the public on 18 June 2012; cited by Palmer, pp. 547-548.

developments . . . provided the indispensable intellectual background and impetus to ONA's path-breaking work in the late 1980s on the concept of the RMA.²⁴ In no small part, this impetus was created by purloined information concerning Warsaw Pact wargames.

The Baltic Game example

In a series of games from 2014 to 2015, the RAND Corporation explored Russian aggression against the Baltic states and NATO. What was the outcome of these games? The Baltic states and NATO consistently and quickly lost to various Russian initiatives.²⁵ From these gaming efforts RAND concluded that stationing about seven brigades, three of them heavy armored brigades, in the Baltic area would probably be sufficient to deter a Russian quick grab. RAND estimated that these deployments would come at an annual cost of \$2.7 billion. Within weeks of the release of this report, U.S. Secretary of Defense Ash Carter requested \$3.4 billion with the 2017 defense budget for additional troops to counter Russian aggression and reinforce NATO allies.²⁶ The program, called the European Reassurance Initiative, represents a 400% increase over current funding levels and will support increase presence in Eastern Europe. Of course, strong calls from the Baltic states for increased American response to Russian aggression cannot be dismissed, but the RAND games also provided U.S. policy makers with an estimate of the level of response needed to deter Russian aggression and an alert about the acute need to take material steps to reinforce deterrence in the Baltic. Here, wargaming may not have provided deterrence by itself, but it certainly helped inspire a major deterrence action beyond the current exercises. It is hard to estimate if or how closely Russians were monitoring the progress and reporting from the RAND wargames, but it is apparent that they noticed

24 Palmer, pp. 547-548.

25 David A. Shlapak and Michael, W. Johnson, *Reinforcing Deterrence on NATO's Eastern Flank*, 2016, RAND Corporation Arroyo Center, RR-1253-A.

26 'Pentagon Seeking \$3.4 Billion to Counter 'Russian Aggression,' Mike Eckel, RadioFreeEurope, 02 February 2016, <http://www.rferl.mobi/a/pentagon-bidget-increase-russian-aggression/27528038.html>

the NATO decision to reinforce the Baltic states.²⁷

Important Lessons Noticed by None

Sometimes, wargaming will have no effect on adversaries or even those conducting the games, which underscores the requirement of purposely making games overt and public if messaging is an intended objective. For example, in 1999, Kosovo strike operations were in full swing and the U.S. Joint Chiefs of Staff's attention was on the European Command and NATO. There was little interest in conducting a game addressing post-combat operations in a future war in other theaters, especially one dealing with 'winning the peace.' Nevertheless, Marine General Anthony Zinni, head of Central Command at the time, decided to explore this very contingency. Zinni also took the unusual step of providing specific 'pacification and reconstruction' objectives to game players who were drawn from the actual civilian and defense agencies who would be involved in undertaking this type of operation. This 'Desert Crossing' game considered many political, security and economic issues that would emerge in the aftermath of regime collapse following U.S. ground action against a targeted government.

Several important lessons were gleaned from this game experience. For example, game observers noted that the United States needed to begin inter-agency planning and coordination to deal with war's aftermath before the start of actual ground operations. The game also revealed that regime change would not necessarily enhance political stability; instead, it created the distinct possibility that neighboring states would take advantage of internal instability in the targeted country by settling old scores or supporting ethnic groups or political movements who championed political goals at odds with American objectives. Additionally game play revealed that it was important to identify new leaders and officials who

27 Jill Dougherty, 'In Europe and Russia, There's Talk of War,' *Newsweek* 7/19/16 <http://www.newsweek.com/europe-and-russia-theres-talk-war-481510>

could quickly move to reassert control of government agencies left adrift by regime collapse. In short, important and deliberate planning had to be undertaken to address important government functions before using force to replace an existing regime.

After the game, General Zunni directed Central Command to begin planning for an inter-agency effort to address these issues, but made little progress by the time he departed the command in 2000. Truth be told, the lessons gleaned from the game were completely lost by the time of Operation Iraqi Freedom and the destruction of Saddam Hussein's regime in April 2003. Although the United States was faced with many of the same post-conflict problems addressed in Desert Crossing, staff turnover created a situation in which virtually no one remaining in Central Command participated in the game. Like Yarnell's attack on Oahu in 1932, time diminished the wargame's effect on operations and planning. The result was that reality reflected game play – weak interagency pre-planning and an inability to anticipate or respond to challenging post-conflict issues.

Conclusion: wargaming as part of a strategic communication plan

Integrating wargaming into a targeted strategic communication plan to bolster deterrent actions may be a useful tactic, especially if the adversary sees the wargame as a credible and serious effort. Wargames entail costs, serve as a sort of metric for current or future capabilities, and potentially are quite salient (vivid) to outside observers – qualities that should bring them to the attention to individuals not directly involved in the game. Moreover, it is no coincidence that the same conditions that increase a wargame's effectiveness when it comes to influencing the planning and operations of the side conducting the game also seem to influence the game's impact on outside observers. For example, if the games involve individuals who can actually influence policy, strategy or

operations, then observers will note that the game entails real costs and potential risks and thus merits careful scrutiny. Likewise, if serious people linked to the side conducting the wargame consider the game's findings to be important, then others are likely to take those findings seriously. If allies are invited to participate by demonstrating coordinated efforts and combined capabilities, then additional signals might be sent indicating that the game is testing concepts or operations that could be quickly put into practice.

If games are either timely or conducted as a series then they are also likely to entail costs and engage capabilities that are in short supply, qualities that should indicate to observers that something of importance is actually the subject of the game. Timely games are those that respond to recent provocative events. Games that unfold in a series signal a long-term commitment to educate policy makers and military officers about the complexities of the situation and environment. The way information about the game is revealed – intentionally, inadvertently, or through espionage – also has an impact on outside observers.

Our brief and admittedly incomplete survey of the impact of various wargames also suggests that that link between gaming and deterrence is not clear cut or inevitable. In theory, wargaming can reinforce deterrence; nevertheless, in practice wargaming produces uneven effects marred by all sorts of unintended consequences on friend and foe alike.²⁸ At the forefront of these concerns is the fundamental issue of secrecy surrounding wargames. Nevertheless, some observers suggest, *ceteris paribus*, that as the number of individuals participating in gaming efforts increase, the likelihood that information about the existence and contents of the evolution will reach interested outside parties also increases. Leaks also can occur unexpectedly as game participants become overly engaged in secret proceedings and take disputes about adjudication or conduct of the

28 One recent study even make a convincing case that gaming, table-top exercises and various red-teaming efforts rarely produce intended positive effects, despite the constructive achievements of the exercise see Micah Zenko, *Red Team: How to Succeed by Thinking Like the Enemy*, New York, Basic Books 2015.

game outside the confines of the game itself.²⁹

Wargaming alone may be considered a weak tool compared to other methods of sending signals to bolster deterrent threats. Nevertheless, wargames can have both subtle and significant effects on the perceptions of friend and foe alike. As the RAND Baltic games example demonstrates, games can send a signal that untoward events have not gone unnoticed, that countermeasures are being assessed and that stronger remedial actions to bolster deterrence are about to follow. Wargames can suggest that resource allocation, exercises, force deployment or actual hostilities are under serious consideration. We may never be able to prove wargaming has any actual deterrent effect on a real adversary, but the best way to assess the potential impact of a wargame on an adversary's assessment of deterrent threats might actually be to explore that very issue in a wargame.

²⁹ The Millennium Challenge 2002 Wargame developed by the U.S. Joint Forces Command over a two-year period at the cost of over 250 million dollars deteriorated into acrimony over game play adjudication and fundamental disagreements over game objectives see Zenkio, pp. 52.63.



**Beatrice Heuser,
Tormod Heier and
Guillaume Lasconjarias
Editors**

Military Exercises: Political Messaging and Strategic Impact

Foreword by

**General Denis Mercier
Supreme Allied Commander Transformation**



Founded in 1951, the **NATO Defense College (NDC)** was established to contribute to the effectiveness and cohesion of the Atlantic Alliance through its role as a major centre of education, study and research on Euro-Atlantic security issues. The **NDC Research Division** serves as a key forum for discussion and objective analysis of contemporary NATO policy challenges, as well as a central pillar of the College's outreach activities.

**Military Exercises:
Political Messaging and Strategic Impact**



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Via Giorgio Pelosi, 1 - 00143 Rome, Italy

Fax +39-06-50 52 57 97

E-mail: m.dimartino@ndc.nato.int

Website: <http://www.ndc.nato.int>

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Contributors

Jeffrey APPLEGET

Dr. Jeff Appleget is a retired Army Colonel who served as an Artilleryman and Operations Research analyst in his 30-year Army career. He teaches courses at NPS and for various sponsors around the world. Jeff directs the activities of the NPS Wargaming Activity Hub. He is also the Joint Warfare Analysis Center (JWAC) Chair of Applied Operations Research at NPS. Jeff is currently serving on NATO SAS-130 examining his wargaming expertise to NATO Course of Action analysis research. His other research interests include Irregular Warfare and Stability Operations modeling, Amphibious Operations modeling, Wargaming, Combat Modeling, and Integer Programming. He is a member of the NATO-SAS 130 panel 'Course Of Action Analysis In The 21st Century.' He served on the Military Operations Research Society (MORS) Board of Directors from 2000-2004.

Dr Appleget holds a Ph.D. in Operations Research from the Naval Postgraduate School, M.S. in Operations Research and Statistics, from the Rensselaer Polytechnic Institute, and a B.S. from the United States Military Academy, 1979.

Robert T. DAVIS II

Robert T. Davis II is an Associate Professor of History at the School of Advanced Military Studies, Fort Leavenworth, Kansas. He currently directs the Advanced Strategic Planning and Policy Program. He holds a PhD in Modern European History from Ohio University. His publications include *The Challenge of Adaptation: The US Army in the Aftermath of Conflict, 1953-2000* (U.S. Combat Studies Institute 2008), *The Military and the Media* (2009), and *U.S. Foreign Policy and National Security*, 2 vols. (Praeger 2010). His most recent publication is 'NATO,

Western Europe, and the Eisenhower Administration' in *A Companion to Dwight D. Eisenhower*. He is currently working on a biography of General Alfred Gruenther.

Peter DOMBROWSKI

Dr. Peter Dombrowski is a professor of strategy at the Naval War College in the Strategic and Operational Research Department. His most recent book, coauthored with Simon Reich, is *The End of Grand Strategy: US Maritime Operations in the Twenty-first Century* (Cornell 2018).

Ilay A. D. FERRIER

Following a career in the UK Royal Marines, including an assignment at SHAPE, Mr Ilay A. D. Ferrier joined the International Staff (IS) at the NATO Headquarters, Brussels where he became Director of Crisis Response Systems and Exercises in Operations Division International Staff (IS) between 1995 to 2012. While at SHAPE, and following the end of the Cold War, he set up NATO's annual strategic crisis management exercise (CMX) series and at NATO HQ he coordinated the planning and conduct of 18 CMXs, including with the WEU, EU, UN, ICRC, with Russia and with most partner countries. He was also responsible for creating and maintaining NATO's crisis response system and was involved in the NATO HQ crisis management task force handling IFOR, SFOR, KFOR, ISAF and OUP.

Ryan W. FRENCH

Ryan W. French is an analyst and project director with the Strategic Initiatives Group at the Center for Naval Analyses, where his research focuses on seapower, strategic stability, deterrence, and escalation management. Previously, he worked with the Strategic and Operational Research Department at the U.S. Naval War College, where he provided design and development support to wargames and tracked geopolitical and military affairs across the Asia-Pacific. He has also worked with

the Center on Contemporary Conflict at the U.S. Naval Postgraduate School in Monterey, as well as the World Policy Institute in New York and the Carter Center in Atlanta. Mr. French's research has appeared in *Strategic Studies Quarterly* and *the Bulletin of the Atomic Scientists*, with commentaries in *War on the Rocks* and the *World Policy Journal Blog*. He holds an M.A. in Security Studies from the U.S. Naval Postgraduate School and an A.B. in International Affairs from the University of Georgia.

John GILL

John Gill (Jack), an adjunct professor affiliated with the Near East–South Asia Center for Strategic Studies in Washington DC, is a former U.S. Army South Asia Foreign Area Officer who has worked on South Asian security issues since the mid-1980s. Prior to becoming a South Asia specialist, he served two tours in Germany during the Cold War and participated in many exercises at all levels, including serving on the planning staff for REFORGER 88, the last full-scale ground maneuver exercise of this nature. He has authored several studies of South Asia security topics and is an internationally recognized military historian of the Napoleonic era.

Beatrice HEUSER

Beatrice Heuser holds the Chair in International Relations at the University of Glasgow, and has degrees from the Universities of London (BA, MA) and Oxford (DPhil), and a Habilitation (higher doctorate) from the University of Marburg. She previously taught at the Department of War Studies, King's College London; the University of Reading, at five French universities/higher education institutions (mainly in French, most recently Paris II Assas, and at Sciences Po' Paris) and (in German) at two German universities, and has spent a year at NATO headquarters. From 2003-2007 she was Director of Research at the Bundeswehr's Office for Military History. Her publications include *NATO, Britain, France and*

the FRG: Nuclear Strategies and Forces for Europe (Macmillan 1997), *The Evolution of Strategy* (Cambridge University Press 2010), *Reading Clausewitz* (Pimlico 2002), *Strategy before Clausewitz* (Routledge 2017), with Eitan Shamir (eds) *Insurgencies and Counterinsurgencies: National Styles and Strategic Cultures* (Cambridge University Press 2017) and many other books, articles and edited volumes on nuclear strategy, NATO, and Transatlantic Relations. She is a member of several advisory boards, including that to the UK Defence Academy.

Tormod HEIER

Tormod Heier is a Lieutenant Colonel in the Norwegian Army and holds a PhD in Political Science from the University of Oslo. He serves as a researcher at the Norwegian Defence University College in Oslo, and has edited several anthologies on Norwegian and European security and defence policy. His latest anthologies are *Ukraine and Beyond: Russia's Strategic Security Challenge to Europe* (Palgrave 2016) and *Kompetanseforvaltning i Forsvaret* [Managing Competence in Norway's Armed Forces] (Fagbokforlaget 2017). Dr. Heier has previously worked for the Norwegian Intelligence Service, the Norwegian Ministry of Defence, and NATO's International Security Assistance Force, Afghanistan. He was awarded Norwegian PEN's Ozzietzky Prize for promoting freedom of speech in 2017.

Guillaume LASCONJARIAS

Dr. Guillaume Lasconjarias is a senior researcher in the Research Division of the NATO Defense College in Rome. A military historian, his areas of interest include military doctrine in general, hybrid war, A2/AD, counter-insurgency operations, revolution in military affairs and professional military education. Prior to his current position, he was a researcher at the French Ministry of Defense (IRSEM - Institute for Strategic Research) from 2010 to 2012. In this capacity he lectured on various topics at the French École de Guerre, where he was also in

charge of an elective course. From 2007 to 2010, he served as Deputy to the Head of the Research Bureau at the French Army Centre for Force Employment Doctrine (CDEF). He started his professional career as a university lecturer at the Sorbonne in Paris, where he also received his PhD. A former student of the École Normale Supérieure in Lyon, he has published or edited six books and more than 50 articles in French, English, German and Italian publications. His latest works have been published by the US Army War College and the academic journal *Survival*. A reserve infantry officer, Guillaume Lasconjarias graduated from Saint-Cyr Coëtquidan and has been deployed on various exercises and operations.

Jeffrey A. LARSEN

Jeffrey A. Larsen is Director of the Research Division at the NATO Defense College. Prior to his NATO posting in 2013, Dr. Larsen served as a Senior Scientist and Program Manager with Science Applications International Corporation (SAIC) and President of Larsen Consulting Group LLC in Colorado Springs. A retired US Air Force Lt Colonel, he served 21 years as a command pilot in Strategic Air Command, Associate Professor of Political Science and instructor pilot at the Air Force Academy, and first Director of the Air Force Institute for National Security Studies.

Dr. Larsen is the author or editor of more than 150 books, journal articles, chapters, and monographs on issues in national security, nuclear weapons and strategy, WMD proliferation, arms control, aerospace power, NATO, European politics, and strategic culture. Recent books include *NATO's Responses to Hybrid Threats*, with Guillaume Lasconjarias (NDC, 2015), *On Limited Nuclear War in the 21st Century*, with Kerry Kartchner (Stanford, 2014).

Dr. Larsen is a graduate of the US Air Force Academy (BS, Soviet Area Studies), US Naval Postgraduate School (MA, National Security Affairs), Defense Language Institute (German), Air War College, and Princeton

University (MA, International Relations, and PhD, Politics). He holds an FAA Airline Transport Pilot rating with nearly 4,000 flying hours.

Denis MERCIER

General Denis Mercier was confirmed by the North Atlantic Council as Supreme Allied Commander Transformation on 23 March 2015.

He joined the French Air Force academy in 1979 where he completed a Master's degree of Science in 1981. Qualified as a fighter pilot in 1983, he acquired extensive experience both as an operational commander and as a fighter pilot, having flown a total of more than 3000 flying hours primarily on Mirage F1C and Mirage 2000C aircraft, including 182 hours in combat missions.

He commanded the 1/12 'Cambrésis' Fighter Squadron, and participated in numerous NATO exercises and operations, including Operation Deny Flight over Bosnia-Herzegovina in 1994. In 1999, he integrated the operational planning of French participation in NATO Operation Allied Force in Kosovo.

Posted from 1999 to 2002 as deputy head of the combined joint task force deputy branch at Regional Headquarters AFNORTH, in Brunssum (Netherlands), he contributed to the development of the Combined Joint Task Force (CJTF) concept. Back in France, he was appointed as the commander of Reims Air force base, integrating the Mirage F1CR squadrons under his command into ISAF in Afghanistan.

From 2004 to 2008 he was assigned to the French Air Force headquarters in Paris, as the head of the plans division and was nominated as a flag officer in 2007 as Acting Chief of Staff (ACOS) for budget and performance.

He then commanded the French Air Force Academy in Salon-de-Provence, where he was a transformative leader, fostering enduring partnerships with allies and prestigious universities.

Following his nomination as senior military advisor for the minister of Defence in 2010, General Mercier prepared and participated in all

NATO ministerial meetings between 2010 and 2012, as well as the NATO summits of Lisbon and Chicago. Moreover, he was the minister's special advisor for Operation Unified Protector over Libya. He became the French Air Force Chief of Staff on September 17th 2012, which formalized his contact with Air Chiefs throughout the Alliance. He has been awarded the rank of Grand Officer of the French Legion of Honor. He is also, among other distinctions, an officer of the National Order of Merit.

Jeffrey E. KLINE

A retired naval officer with 26 years of service including to two sea commands, Jeff Kline is currently a Professor of Practice in the Naval Postgraduate School Operations Research department and holds the university's Chair of Systems Engineering Analysis. He teaches campaign analysis, systems analysis and executive programs in strategic planning and risk assessment. Jeff Kline supports applied analytical research in maritime operations and security, theater ballistic missile defense, and future force composition studies. He has served on the U.S. Chief of Naval Operations' Fleet Design Advisory Board, several Naval Study Board Committees of the National Academies, and several SAS NATO study programs. His faculty awards include the Superior Civilian Service Medal, 2011 Institute for Operations Research and Management Science (INFORMS) Award for Teaching of OR Practice, 2009 American Institute of Aeronautics and Astronautics Homeland Security Award, 2007 Hamming Award for interdisciplinary research, 2007 Wayne E. Meyers Award for Excellence in Systems Engineering Research, and the 2005 Northrop Grumman Award for Excellence in Systems Engineering. He is a member of the Military Operations Research Society and the Institute for Operations Research and Management Science. He earned a Bachelor of Science in Industrial Engineering from the University of Missouri, a Master of Science in Operations Research from the Naval Postgraduate School, and a Master of Science in National Security Studies from the National Defense University's National War College.

Johan NORBERG

Mr Johan Norberg is a Deputy Research Director at the Swedish Defence Research Agency (FOI) in Stockholm. He holds an MSc in Russian and Business Administration from Uppsala University and has studied at St Petersburg's Institute of Finance and Economy. Between 2015 and 2017 he was a visiting scholar at Columbia University in New York City. He is working on a PhD in the UK. His research covers developments in the Russian Armed Forces, especially their fighting power and deployments in Central Asia and the Caucasus. He has also worked in the Swedish Ministry of Defence, the Ministry for Foreign Affairs and the Swedish Parliament. As a reserve officer in the Swedish Army he has served on peacekeeping operations in Bosnia, Georgia, Lebanon and on the Golan Heights.

Spyridon PLAKOUDAS

Dr Spyridon Plakoudas is an Assistant Professor in Strategy and IR at the American University in the Emirates and Vice President of the think tank KEDISA in Greece. He has previously taught at the Greek Staff Academy. He holds an MSc in Strategy from the University of Aberystwyth and a PhD from the University of Reading. His publications relate to the modern history of Greece and the Balkans, Turkey and the Middle East as well as Strategy and Security —with an emphasis on terrorism and insurgency. They include *The Greek Civil War: Strategy, Counterinsurgency and the Monarchy* (I.B. Tauris 2017) and *Insurgency and Cointerinsurgency: Turkey and the New PKK* (Palgrave 2018).

Diego A. RUIZ PALMER

Diego A. Ruiz Palmer is currently Policy Advisor to the Director, Nuclear Policy, in the Emerging Security Challenges Division of the International Staff at NATO Headquarters, Brussels, Belgium. He has held managerial positions on the International Staff successively in the areas of armaments planning, crisis management, operations planning,

strategic foresight, and economic affairs. From 1980-1991, he was an analyst on the National Security Study Memorandum 186 task force assembled under the authority of the Director of Net Assessment, U.S. Department of Defense, to provide assessments and advice on Soviet and NATO operational concepts and the NATO-Warsaw Pact balance of forces to the Secretary of Defense. Diego has published widely, including Research Papers no. 120 *Back to the Future? Russia's hybrid warfare, revolutions in military affairs, and Cold War comparisons*, and no. 132 *The Framework Nations' Concept and NATO: Game-Changer for a New Strategic Era or Missed Opportunity?* published by the NATO Defense College in October 2015 and July 2016, respectively. He holds degrees from the George Washington and Harvard Universities and from the Institut d'Etudes Politiques (Sciences Po') in Paris.

Erwin A. SCHMIDL

Born in Vienna 1956, studied History and Anthropology at the University of Vienna (Dr. phil. 1981); taught at the University of Innsbruck (Habilitation 2001) and other universities. Since 1981 in the Austrian Ministry of Defence, he became director of the Institute for Strategy & Security Policy at the National Defence Academy in Vienna in 2012. In 2010-2015, he served as Secretary General of the International Commission of Military History. Various publications on modern military, political, colonial and cultural history; with an emphasis on international peace operations and Cold War history.

Olivier SCHMITT

Olivier Schmitt holds a Master's in International Affairs from the Graduate Institute of International and Development Studies in Geneva, a Master's in Political Science from Sciences Po' Aix-ein-Provence, and a PhD from the Department of War studies at King's College London. He is an Associate Professor of political science at the Center for War Studies, University of Southern Denmark. He is also the vice-president

of the French Association for War and Strategic Studies (AEGES). His research focuses on military change, multinational military cooperation and transatlantic security. He is the author of *La RFA et la Politique européenne de la Sécurité et Défense* (L'Harmattan 2009), *Guerre et Stratégie: Approches, Concepts* (PUF 2015), and of *Pourquoi Poutine est notre allié* (Hikari 2017). His latest book, *Allies that Count: Junior Partners in Coalition Warfare*, was published by Georgetown UP in 2018.

James SHEAHAN

Mr Sheahan has worked for large game publishers on video games of all types and sizes for almost 20 years and worked as a consultant for Google and many of the world's largest advertising agencies. James has been a game designer for the last 10 years and is currently designing a wargame for a board games company. With a keen interest in history and strategy, in 2014, James decided to undertake an MA in Strategic Studies and Military History at the University of Reading. James is currently researching British troop activities during WWI with a view to mapping them.

James W. WIRTZ

James J. Wirtz is Dean of the School of International Graduate Studies at the Naval Postgraduate School, Monterey, California. He is the author of *Tet Offensive: Intelligence Failure and War* (Cornell University Press, 1991), *Counterforce and Theatre Missile Defense* (SSI, 1995), and *Understanding Intelligence Failure: Warning, Response and Deterrence* (Routledge, 2017). He is the editor of many volumes, and co-editor with Loch Johnson of *Intelligence: The Secret World of Spies* (Oxford 2015), and the author of many articles on various aspects of strategic studies. He received his Ph.D. from Columbia University and he was a John M. Olin Fellow at the Center for International Affairs, Harvard University. His research focuses on intelligence, strategic studies and deterrence.

Amr YOSSEF

Dr. Amr Yossef is an independent scholar. His areas of expertise include Middle East politics, Arab-Israeli conflict, international security and foreign policy analysis. Previously he has been an Adjunct Professor at the American University in Cairo and a Post-Doctoral Fellow at New York University. He holds a Ph.D. from the University of Trento (Italy) with a dissertation on decision-making in Arab-Israeli wars. Dr. Yossef is the author (with Dr. Joseph Cerami) of *The Arab Spring and the Geopolitics of the Middle East* (Palgrave 2015) and a number of academic articles that appeared in *Contemporary Arab Affairs*, *Journal of Strategic Studies*, *Digest of Middle East Studies*, and *European Political Science*.

Christopher D. YUNG

Christopher D. Yung is the Donald Bren Chair of Non-Western Strategic Thought at the U.S. Marine Corps University. In this capacity he is the Director and Professor of East Asian Studies at the University. He lectures and leads seminars on Asian strategic issues, especially related to the People's Republic of China. Dr. Yung researches and publishes on China's strategic interests, the Chinese military, Chinese foreign policy U.S. policy to the Asia-Pacific, and Chinese maritime security. He received both his Doctorate and Masters from the Paul H. Nitze School of Advanced International Studies (SAIS) and received language certificates in mandarin from Columbia University and the Beijing Foreign Language Teachers Institute.