THE HYBRID MINDSET AND OPERATIONALIZING INNOVATION: TOWARD A THEORY OF HYBRID

A Monograph

by

MAJ John R. Davis, Jr. United States Army



School of Advanced Military Studies United States Army Command and General Staff College Fort Leavenworth, Kansas

AY 2014-01

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Depentment of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1. REPORT DATE (DD-MM-YYYY)	2. REPORT TYPE	3. DATES COVERED (From - To)
08-05-2014	SAMS Monograph	JUNE 2013 – MAY 2014
4. TITLE AND SUBTITLE		5a. CONTRACT NUMBER
The Hybrid Mindset and Operationalizi	d 5b. GRANT NUMBER	
		5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER	
Major John R. Davis, Jr., U.S. Army	5e. TASK NUMBER	
		5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)	8. PERFORMING ORGANIZATION
II C Amery Cohool of Advanced Militar	v Ctudios	REPORT
U.S. Army School of Advanced Militar ATTN: ATZL-SWD-GD		
1 Reynolds Ave.		
Fort Leavenworth, KS 66027-2301		
A ADAMAGAMA (MANUTADINA AATMAY	NAME(O) AND ADDRESS(ES)	40.000000000000000000000000000000000000
9. SPONSORING / MONITORING AGENCY	NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
		11. SPONSOR/MONITOR'S REPORT
		NUMBER(S)

12. DISTRIBUTION / AVAILABILITY STATEMENT

Approved for Public Release; Distribution is Unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

The United States (US) Army is currently training, manning, and equipping to fight a wide range of future threats within the complex and dynamic future US security environment. One of these threats centralizes on the concept of hybrid warfare and a hybrid threat. In the future, hybrid threats will continue to evolve in complexity as more lethal and precision weaponry become readily available to informationage guerillas supported by the proceeds of global criminal activities. Regardless of the future implications of hybrid warfare, the US Department of Defense and US Army have not completely embraced hybrid warfare as a distinctly different form of warfare. Most defense professionals and academics view hybrid warfare as simply the simultaneous melding of various forms of warfare. Perhaps, a better and more inclusive explanation of hybrid warfare and a hybrid threat is the existence and employment of a hybrid mindset.

A hybrid mindset, or hybrid way of thinking, focuses on the interaction of four mental characteristics to develop innovative approaches to create desired operational environments. These four interacting characteristics are – understanding strategic context, a holistic approach to operations, internalization of propensity and potential opportunities, and embracing complexity at the edge of chaos. If future warfare eventually devolves into a battle of the minds, then a hybrid a way thinking will help US Army operational planners out-think and out-adapt future hybrid threats through innovative arrangements of tactical actions in time and space. The idea of a hybrid mindset could be the first step towards a theory of the hybrid phenomenon that explains the essence of a hybrid threat and hybrid warfare.

15. SUBJECT TERMS

Hybrid Warfare, Hybrid Threat, Hybrid Mindset, Theory of the Hybrid Phenomenon, Future Warfare, Future Threats

	•	•	•	•	
16. SECURITY CLASSIFICATION OF:		17. LIMITATION	18. NUMBER	19a. NAME OF RESPONSIBLE PERSON	
			OF ABSTRACT	OF PAGES	MAJ John R. Davis, Jr.
a. REPORT	b. ABSTRACT	c. THIS PAGE			19b. TELEPHONE NUMBER (include area code)
			UU	73	
U	U	U			

MONOGRAPH APPROVAL

Name of Candidate:	MAJ John R. Davis, Jr.				
Monograph Title:	The Hybrid Mindset and Operationalizing Innovation: Toward a Theory of Hybrid				
Approved by:					
Alice A. Butler-Smith		, Monograph Director			
Jerry A. Turner, COL		, Seminar Leader			
Henry A. Arnold III,	COL, IN	_, Director, School of Advanced Military Studies			
Accepted this 22 nd day	y of May 2014 by:				
Robert F. Baumann, I	Ph.D.	_, Director, Graduate Degree Programs			
		erein are those of the student author, and do not . Army Command and General Staff College or any			

other government agency. (References to this study should include the foregoing statement.)

ABSTRACT

THE HYBRID MINDSET AND OPERATIONALIZING INNOVATION: TOWARD A THOERY OF HYBRID, by MAJ John R. Davis, Jr., USA, 73 pages.

The United States (US) Army is currently training, manning, and equipping to fight a wide range of future threats within the complex and dynamic future US security environment. One of these threats centralizes on the concept of hybrid warfare and a hybrid threat. In the future, hybrid threats will continue to evolve in complexity as more lethal and precision weaponry become readily available to information-age guerillas supported by the proceeds of global criminal activities. Regardless of the future implications of hybrid warfare, the US Department of Defense and US Army have not completely embraced hybrid warfare as a distinctly different form of warfare. Most defense professionals and academics view hybrid warfare as simply the simultaneous melding of various forms of warfare. Perhaps, a better and more inclusive explanation of hybrid warfare and a hybrid threat is the existence and employment of a hybrid mindset.

A hybrid mindset, or hybrid way of thinking, focuses on the interaction of four mental characteristics to develop innovative approaches to create desired operational environments. These four interacting characteristics are – understanding strategic context, a holistic approach to operations, internalization of propensity and potential opportunities, and embracing complexity at the edge of chaos. If future warfare eventually devolves into a battle of the minds, then a hybrid a way thinking will help US Army operational planners out-think and out-adapt future hybrid threats through innovative arrangements of tactical actions in time and space. The idea of a hybrid mindset could be the first step towards a theory of the hybrid phenomenon that explains the essence of a hybrid threat and hybrid warfare.

ACKNOWLEDGEMENTS

I would like to thank Dr. Gary Bjorge for his insight into the Huai Hai Campaign and how Sun Tzu's theory of warfare and ancient Chinese philosophy influenced the actions of Mao Zedong. Additionally, I greatly appreciated Dr. Mark Gerges for his in-depth knowledge of the actions of Wellington during the Peninsular War and guidance to the Lines of Torres Vedras as the best example of a hybrid campaign during the war. Lastly, I would like to thank my eight-year-old son, Caleb B. Davis. As a geographical bachelor and single parent for the second half of SAMS, my son has endured countless hours of watching me read books and write papers. However, he was always eager and willing to test any of my theories on a hybrid way of thinking to link tactical actions on the battlefield in his *Call for Duty* video game, which normally resulted in an adjustment to my argument.

TABLE OF CONTENTS

ACRONYMSv
ILLUSTRATIONS vi
INTRODUCTION: THE HYBRID WARFARE CONSTRUCT
ANCIENT CONNECTIONS: MAO AND THE HUAI HAI CAMPAIGN1
MANAGING COHERENCE AND COMPLEXITY: THE LINES OF TORRES VEDRAS2
CONTINUING RESISTANCE: NASRALLAH IN THE 2006 SECOND LEBANON WAR4
CONCLUSION: A THOUGHT PROCESS FOR INNOVATION AND TOWARDS A THOERY OF HYBRID
BIBLIOGRAPHY60

ACRONYMS

ATGM Anti-Tank Guided Munition

CPFA Central Plains Field Army

CCP Chinese Communist Party

COE Contemporary Operational Environment

COIN Counterinsurgency

DOD Department of Defense

ECFA East China Field Army

4GW Fourth Generation Warfare

GW Generation Warfare

IDF Israeli Defense Forces

NDS National Defense Strategy

OE Operational Environment

PLA People's Liberation Army

QDR Quadrennial Defense Review

UN United Nations

US United States

ILLUSTRATIONS

Map 1. Eastern China Political Map	15
Map 2. PLA Operations Overlay from 24 November 1948 to 10 January 1949	19
Map 3. Obstacle Overlay of the Lines of Torres Vedras, 1810	35
Map 4. Operations Overlay of Hezbollah's Defense of southern Lebanon	58

"Real war is an inherently uncertain enterprise in which chance, friction, and the limitations of the human mind under stress profoundly limit our ability to predict outcomes; in which defeat to have any meaning must be inflicted above all in the minds of the defeated; and in which the ultimate purpose of military power is to assure that a trial at arms, should it occur, delivers an unambiguous political verdict."

—Major General (Ret.) Robert Scales, Jr., "Preparing for War in the 21st Century"

INTRODUCTION: THE HYBRID WARFARE CONSTRUCT

Major General (Ret.) Robert Scales, Jr., the 44th Commandant of the United States (US) Army War College, captured the essence of the phenomenon of war. Like the nineteenth century Prussian military officer and theorist Carl von Clausewitz, Scales postulated that real war is full of uncertainty and complexity, which limits the predictability of its outcome. Furthermore, Scales highlighted that war will continue to be an inherently human endeavor in which the minds and mindsets of the warring parties play a significant role. These fundamental principles of this theory of the phenomenon of war establish the context of this monograph as future warfare continues to evolve into a battle of the minds.

In numerous organizations of the military and academe, a debate over the next conflict continues with no end in the near future. Some of this discourse revolves around a central issue, a subject thought to revolutionize the conduct of warfare in the twenty-first century and beyond. A future hybrid threat, as US Army Doctrine defines it, consists of "the diverse and dynamic combination of regular forces, irregular forces, terrorist forces, criminal elements, or a combination of these forces and elements all unified to achieve mutually benefitting effects." This represents an innovative adaptation for an adversary force in the Contemporary Operational Environment (COE). Hybrid warfare is an approach to war that adversaries of the United States will utilize to achieve continuous positions of advantage in future conflicts relative to US Army

¹Carl von Clausewitz, *On War*, trans. and ed. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1989), 89, 119-120.

²Headquarters, Department of the Army, Army Doctrine Reference Publication (ADRP) 3-0, *Unified Land Operations* (Washington, DC: Government Printing Office, 2012), 13.

strengths in conventional warfare. This form of warfare extends, temporally and spatially, a conflict into a fight for control of populations in a test of strategic wills. In addition, hybrid warfare negates the precision and lethal technological advantages of US firepower and devolves warfare into something that favors a hybrid threat's capabilities. But, is this form of warfare truly revolutionary; or, is it just "a new spin on old tricks?" This question is exactly where the discussion truly begins.

The 2006 Second Lebanon War, fought between Israel and elements of the Lebanese population, is an interesting conflict to examine with regard to this question about the nature and implications of hybrid warfare. During the conflict, the Israeli Defense Forces (IDF) attacked into Lebanon thinking their overwhelming technological and precision firepower superiority would quickly defeat the Hezbollah rebels. Although the IDF was engaged in counterinsurgency (COIN) operations against suicide bombers at the time, Hezbollah, a Lebanese Shi'a militia, proved the IDF wanting in its attempt to defeat a hybrid threat. Hezbollah combined information-age guerrillas and guerrilla tactics with precise and lethal conventional weaponry, funded from global criminal activities, into a formidable fighting force. Throughout the war, its tactics devolved the conflict from conventional to hybrid warfare and expanded it in time and space, negating the IDF's technological advantages. This conflict concluded in a practical stalemate owing to the IDFs inability to decisively defeat Hezbollah before international and Israeli public sentiment called for a cease-fire.

Consensus among numerous defense analysts was that Hezbollah's combination of "conventional military tactics with guerilla and terrorist activities appeared to represent a novel approach to war that would revolutionize conflict in the twenty-first century." However,

³Williamson Murray, "Conclusion: What the Past Suggests," in *Hybrid Warfare: Fighting Complex Opponents from the Ancient World to the Present*, ed. Williamson Murray and Peter R. Mansoor (Cambridge: Cambridge University Press, 2012), 290.

Williamson Murray, an American military historian, argued that despite the apparent revolutionary implications of Hezbollah's actions, hybrid warfare might be the norm for human conflict instead of the exception.⁴ Williamson went on to state that, "much of the present only represents an echo of the past."⁵

The defense community's contradicting views of hybrid warfare, as a new or novel concept rather than the natural evolution of pre-existing warfighting capabilities, is exactly where this research truly originates. Instead of discourse on the existence of hybrid warfare, this paper argues that hybrid warfare is a state of mind, or way of thinking, that enables contemporary forces to offset the decision-making cycle of their adversary. If this is the case, it has significant implications for future US Army operational planners. If hybrid warfare is truly a manifestation of a hybrid mindset, then its significance resides in offsetting the decision-making calculus of a continually changing hybrid threat to create opportunities that US Army forces can exploit in future contingency operations. Prior to the main body of this monograph, an examination of existing literature on the subject of hybrid warfare will reveal gaps in contemporary explanations of the hybrid warfare phenomenon for further exploration.

Military and academic works on the concept of hybrid warfare vary substantially, without emerging consensus. Critical to uncovering the evolution of the concept is understanding the time and context in which the concept of hybrid warfare broke from traditional thoughts of warfare. If a researcher views the phenomenon of war as part of a larger societal system, and the product of social, economic, and technological upheavals, it assists with understanding the nexus of hybrid warfare. Two military historians, MacGregor Knox and Williamson Murray, created a framework to explain how revolutions within society can directly impact the waging of war. This represents

⁴Murray, "Conclusion: What the Past Suggests," 290.

⁵Ibid., 290-291.

an important place to begin the hybrid warfare review because, at its core, hybrid warfare is the unique melding of various forms of warfare to achieve a common purpose.

Knox and Murray developed the concept of two phenomena, military revolutions and Revolutions in Military Affairs (RMAs), and argued how they can influence the way in which a nation wages war. Military revolutions consist of "massive social and political changes that have restructured societies and states, and fundamentally altered the manner in which military organizations prepared for and conducted war." These revolutions change the military organizations' objectified realities in struggle to just survive the societal upheavals. Knox and Murray described RMAs as "periods of innovation in which armed forces develop novel concepts involving changes in doctrine, tactics, procedures, and technology." Only after military forces internalized the military revolution by innovating, adapting, and developing proven solutions to the new socially constructed reality, did they finally realize the RMA. These concepts and the natural tension between military revolutions and RMAs leads to understanding Alvin and Heidi Toffler's ideas on waves in society and William Lind's ideas on Fourth Generation Warfare (4GW). These concepts combined to create early thoughts on hybrid warfare.

The Tofflers, both futurist thinkers, explained the relationship between waves, or revolutions, in society and warfare. The Tofflers proposed a theory of the evolution of societies based on the principle of three great waves and primary sources of wealth: agriculture, which comprised the first wave, industrialization, the second wave, and technology/information, the

⁶MacGregor Knox and Williamson Murray, "Conclusion: The Future Behind Us," in *The Dynamics of Military Revolution*, *1300-2050*, ed. MacGregor Knox and Williamson Murray (Cambridge: Cambridge University Press, 2009), 176.

⁷Peter L. Berger and Thomas Luckmann, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge* (New York: Anchor Books, 1967), 1, 23, 26-31.

⁸Knox and Murray, "Conclusion: The Future Behind Us," 179.

third wave. Societal restructuring from each wave created changes in the conduct and execution of war as ideas of power and wealth shifted from one wave to the next. William Lind, an American military thinker, and his co-authors expanded and transposed the Tofflers' concept into Generations of Warfare (GW). Lind and his colleagues argued that the history of warfare has three distinct GWs: the tactics of line and column, 1GW; massed and accurate firepower, 2GW; and maneuver, 3GW. The structure and characteristics of societies throughout history drove the development of these three different GWs. Upon concluding their research in the early 1990s, the Tofflers and Lind drew the conclusion that society and warfare was on the cusp of another shift.

The Tofflers viewed this shift as the interplay between different societies and their access to different waves of technology or sources of wealth. The complexity of the COE creates instances where first, second, and third world countries interact on a global scale in a fight for power, position, and resources. They viewed this occurrence as instance in which a first wave country will attempt to acquire second or third wave warfighting capabilities. The interplay of forms of warfare and tactics is the natural result – a nation with a first wave society and military tactics using low-cost and readily available third wave equipment. Lind and his colleagues echoed this understanding in their theory of warfare on the evolution of 4GW.

Lind and his co-authors said 4GW would be complex, nonlinear, and dispersed.

Conceptual and practical lines between combatant and non-combatant and the traditional ideas of war and peace would blur. Furthermore, 4GW would encompass the whole nation or society in a fight to destroy or physically defeat the enemy, internally rather than externally. 12 Internal

⁹Alvin Toffler and Heidi Toffler, *War and Anti-War* (New York: Warner Books, 1993), 35-36, 41-42, 73-74.

¹⁰William Lind, Keith Nightengale, John F Schmitt, Joseph W. Sutton, and Gary I. Wilson, "The Changing Face of War: Into the Fourth Generation," *Marine Corps Gazette* 73, no. 10 (1989): 23.

¹¹Toffler, A. and Toffler, H., War and Anti-War, 94-95.

¹²Lind et al., "The Changing Face of War," 23.

destruction focuses on weakening and delegitimizing the state as non-state actors find innovative ways to challenge the existing state apparatus.¹³ Thomas Hammes, a retired US Marine officer and COIN analyst, summed up 4GW as the "use of all available networks – political, economic, social, and military – to convince the enemy's political decision makers that their strategic goals are either unachievable or too costly for the perceived benefits."¹⁴ It is under the auspices of the Tofflers, Lind and his co-authors, and Hammes that several themes of hybrid warfare emerge in contemporary literature.

The first major theme of hybrid warfare, which is arguably the precursor to the US

Department of Defense's (DOD's) current conceptualization of the concept, is Thomas Huber's

notion of compound warfare. Huber, a former faculty member at the US Army Combat Studies

Institute, posited that many wars throughout history displayed the simultaneous use of regular and
irregular warfare, in which a substantial degree of strategic level synergy existed between forces.

Huber regarded these patterns as evidence of compound warfare and referenced the Peninsular

War (1807-1814) and the Vietnam War (1965-1973) as two prominent examples of the

compound warfare construct. He defined compound warfare as, "the simultaneous use of a

regular or main force and an irregular or guerilla force against an enemy." ¹⁵

One vital component of executing the compound warfare construct is forcing an adversary to overcome the tension between a strategy of mass and dispersion. In order to defeat irregular forces an adversary needs to disperse to control the hinterlands. However, dispersal left that adversary susceptible to isolation and defeat in detail by regular forces due to a lack of mass

¹³Lind et al., "The Changing Face of War," 25-26.

¹⁴Thomas Hammes, *The Sling and the Stone: On War in the 21st Century* (Minneapolis: Zenith Press, 2006), 2.

¹⁵Thomas Huber, "Compound Warfare: A Conceptual Framework," in *Compound Warfare: That Fatal Knot*, ed. Thomas M. Huber (Fort Leavenworth: US Army Command and General Staff College Press, 2002), 1.

at decisive points.¹⁶ Compound warfare increased complexity, friction, and pressure on the battlefield where an adversary eventually abandoned their cause because of numerous futile attempts to defeat the compound force. Huber correctly noted that it was difficult for military forces to develop a strategy to simultaneously combat both. However, his concept only discussed the coordination of regular and irregular forces at the strategic level, not the blurring and melding of these forces at the operational and tactical levels of war.

The Chinese concept of unrestricted warfare, arguably the Eastern or Asian version of hybrid warfare, forms the second major theme of hybrid warfare in contemporary literature. Qiao Liang, a Major General in the People's Liberation Army (PLA) of China, and Wang Xiangsui, a retired PLA officer, devised the concept in 1999 as a means by which developing countries could overcome their existing and potential military inferiorities in relation to the United States in a technologically advanced war. Liang and Xiangsui postulated, "The first rule of unrestricted warfare is that there are no rules, with nothing forbidden." The essence of unrestricted warfare is a war without limits or a war beyond limits. This construct, in the context of globalization, challenges the idea that war and warfare mainly consist in the military domain.

In addition, Liang and Xiangsui argued that future conflict would involve connection points between technology, politics, economics, religion, culture, diplomacy, and the military to create endless possibilities and complexity. The crux of this argument, and its implications for Western militaries, is that it expands warfare beyond the cognitive boundaries and dimensions of warfare common to most Western military thinking. To understand unrestricted warfare, Liang and Xiangsui acknowledged, would require a shift in the minds and thoughts of the West and the

¹⁶Huber, "Compound Warfare," 2.

¹⁷Qiao Liang and Wang Xiangsui, *Unrestricted Warfare* (Beijing: PLA Literature and Arts Publishing, 1999), 2.

American way of war. ¹⁸ Victory would not be found on the physical battlefield, a notion that is common to the American way of war. Instead, "the struggle for victory will take place on a battlefield beyond the battlefield." ¹⁹

The third predominant theme in contemporary literature on hybrid warfare focuses on the development of a broader concept of hybrid challenges at the strategic level. Nathan Freier, a defense strategist and a former Director of National Security Affairs at the Strategic Studies Institute, outlined the challenges and threats to the United States in the post September 11, 2001 security environment. Prior to his work, the United States defined strategic challenges as irregular, catastrophic, traditional, and disruptive events. During his work as a strategist on the 2005 National Defense Strategy (NDS), Freier established the idea of a "hybrid norm – the routine state of nature where key aspects of multiple challenges" combined into one. He subsequently incorporated this construct into the NDS.²⁰

In the future, Freier thought, complex hybrid challenges would emerge from the combination of irregular challenges, unconventional warfare by state and non-state actors, and catastrophic challenges, a weapon of mass destruction or other mass casualty/mass-effect terrorist events, with existing traditional challenges, legacy and advanced conventional warfare capabilities.²¹ Freier cited al-Qaida and its affiliates as an example of a complex hybrid challenge that was irregular in nature, but searching for catastrophic capabilities and effects. These complex hybrid challenges represented the new norm and were a continually evolving combination of preexisting challenges/capabilities available to an adversary. The 2014 *Quadrennial Defense*

¹⁸Liang and Xiangsui, *Unrestricted Warfare*, 162.

¹⁹Ibid., 153.

²⁰Nathan Freier, "Strategic Competition and Resistance in the 21st Century: Irregular, Catastrophic, Traditional, and Hybrid Challenges in Context" (monograph, US Army War College Strategic Studies Institute, 2007), iii.

²¹Ibid., 6, 20, 27, 33, 36.

Review (QDR) echoes Freier's thoughts by including "hybrid contingencies against proxy groups using asymmetric approaches" in the spectrum of possible US conflicts.²² Frank Hoffman, a retired US Marine officer and a Senior Research Fellow with the Institute for National Strategic Studies at the National Defense University, further developed and refined Freier's hybrid challenges construct to the most militarily and academically accepted definition of hybrid warfare.

The fourth, and overarching, theme in the development of the concept of hybrid warfare is Frank Hoffman's construct of hybrid wars. It is now the predominantly accepted military and academic conceptualization of hybrid warfare. Hoffman theorized, "Hybrid wars incorporate a range of different modes of warfare, including conventional capabilities, irregular tactics and formations, terrorist acts including indiscriminate violence and coercion, and criminal disorder." The crux of hybrid warfare lies in its blurring and fusion of fighting forces, technologies, and forms of warfare into numerous combinations of continually increasing complexity. Eventually, hybrid warfare evolves into infinite combinations of forces and means as the lines between regular, irregular, and criminal elements blur and become indistinguishable. 25

In addition to complexity in the presentation of forces, the choice Operational Environment (OE) for hybrid wars is complex, urban terrain where a hybrid adversary could extend the conflict in time and space. Temporal and spatial variation devolves hybrid wars into a protracted battle of wills for control of the population and public opinion.²⁶ To sway fickle public

²²Department of Defense, *Quadrennial Defense Review (QDR) 2014* (Washington, DC: Government Printing Office, 2014), vii.

²³Frank Hoffman, "Conflict in the 21st Century: The Rise of Hybrid Wars" (monograph, Potomac Institute for Policy Students, 2007), 14.

²⁴Ibid., 14, 29.

²⁵John Davis, "Defeating Future Hybrid Threats: The Greatest Challenge to the Army Profession of 2020 and Beyond," *Military Review*, vol. 93, no. 5 (September-October 2013): 25.

²⁶Hoffman, "Conflict in the 21st Century," 15-16.

opinion and manipulate control of the population, a hybrid adversary uses any means necessary. Hybrid adversaries fail to abide by the Rule of Law or Geneva Conventions and attempt to bend or break the rules to their benefit.²⁷ The hybrid warfare construct enables numerically and technologically inferior states and rising non-states actors with an operational approach/strategy to defeat economically and militarily advanced states. An interesting feature of Hoffman's conceptualization of hybrid warfare is its incorporation of previous theories of warfare in the evolution of concept.

Hoffman's image of hybrid war represents the synthesis of the evolution of 4GW, compound warfare, and unrestricted warfare into one all-encompassing concept. His thoughts on how a hybrid adversary can use readily available information technology to sway public opinion, and expand criminal activity through globalization nested with the Tofflers' thoughts on information/technology of third Wave of societies. Hoffman's inclusion of non-state actors and a hybrid adversary's tactic of devolving a conflict into a protracted battle of wills aligned with Lind and his co-authors 4GW principle of internal defeat or destruction of the militarily advanced state. Huber's compound warfare concept of combining the effects of regular and irregular forces permeated in Hoffman's synergistic combination of conventional capabilities and irregular tactics into one. Liang and Xiangsui's concept of unrestricted war or a limitless war, with regard to the warfighting means available for conflict, pervaded into Hoffman's idea that combining numerous modes of warfare, force structures, and methods of employment created continually bifurcating possibilities for a hybrid adversary. Although Hoffman's concept of hybrid wars is a holistic one, developed from previous theories of military and academic professionals, it is not a concept the US DOD fully embraces today.

²⁷Hoffman, "Conflict in the 21st Century," 16.

Most elements of the US Armed Services, the DOD, and Congress fail to recognize hybrid wars as a distinctly different form of warfare because they are just the unique combining of various preexisting forms of warfare. This results in no formal recognition of hybrid warfare in Joint, Multi-Service, or Service doctrine. A US Government Accountability Office Study on Hybrid Warfare in 2010 concluded, "DOD has not officially defined hybrid warfare at this time and has no plans to because DOD does not consider it a new form of warfare." Instead, the study explained that DOD's use of the "term hybrid warfare describes the increasing complexity of future conflicts as well as the nature of the threat." This point aligns with the US Army's current conceptualization of hybrid warfare focused on the idea of a hybrid threat.

US Army Doctrine Publication (ADP) 3-0, *Unified Land Operations*, currently defines a hybrid threat as, "the diverse and dynamic combination of regular forces, irregular forces, terrorist forces, criminal elements, or a combination of these forces and elements all unified to achieve mutually benefitting effects." This is an evolution of the US Army Training Circular (TC) 7-100, *Hybrid Threat*, definition, which states, "A *hybrid threat* is the diverse and dynamic combination of regular forces, irregular forces, and/or criminal elements all unified to achieve mutually benefitting effects." Although these definitions are accurate descriptions of a hybrid threat and channel thinking and discussion in the right direction, are they really the essence of hybrid warfare? With so much discourse and lack of consensus between literature from DOD and academia on the existence of hybrid warfare as a concept, maybe another approach can shed new light on the discussion. This monograph will focus on reinvigorating the hybrid warfare debate by

²⁸Davi D'Agostino, GAO-10-1036R: *Hybrid Warfare*, Performance Audit/Briefing (Washington, DC: US Government Accountability Office, 2010), 2.

²⁹Ibid., 2.

³⁰Headquarters, Department of the Army, Army Doctrine Publication (ADP) 3-0, *Unified Land Operations* (Washington, DC: Government Printing Office, 2011), 12.

³¹Headquarters, Department of the Army, Training Circular (TC) 7-100, *Hybrid Threat* (Washington, DC: Government Printing Office, 2010), 7.

attempting to describe, understand, and visualize the existence of a hybrid mindset, the actual crux of hybrid warfare. By extension, this monograph will imply the practical consequence of this understanding for military and civilian leaders.

This monograph will argue that hybrid warfare does not represent a distinctly different or new form of warfare. The essence of hybrid warfare is in its novel approaches to waging war developed by a warring entity focused on redefining boundaries to combine all available warfighting strategies and capabilities into a coherent operational approach that exploits existing or potential opportunities between friend and foe. At its core, hybrid warfare is not a new form of warfare, but is a hybrid mindset that enables any creative and learning force to disrupt and defeat its adversaries through innovation. A hybrid mindset focuses on the interaction of four mental characteristics to develop innovative and novel approaches to create desired operational environments. These four interacting characteristics are — understanding strategic context, a holistic approach to operations, internalization of propensity and potential opportunities, and a sensitivity to embracing complexity at the edge of chaos.

For its methodology, this monograph will use a qualitative approach and rely on historical research to expose the existence of a hybrid mindset in hybrid conflicts. It will present three case studies – the Huai Hai Campaign (1948-1949), The Lines of Torres Vedras (1809-1811) within the Peninsular War (1807-1814), and 2006 Second Lebanon War (July-August 2006) – from distinctly different contexts and eras of warfare to prove the existence of a hybrid mindset throughout military history. Each of these case studies will explore the following: the context/background of the conflict, a campaign analysis focused on the hybrid nature of the war, the existence of a hybrid mindset, and an assessment of the impact of this mindset on the outcome of the conflict. From there, and in conclusion, this monograph will develop an overarching concept and several principles of the hybrid mindset exposed in the case studies while discussing the implications of this mindset for US Army operational planners and operational artists

preparing to combat future hybrid threats. Understanding a hybrid way of thinking will help to create the initial framework for a theory of hybrid. Finally, note that some portions of this monograph expand on conclusions from an earlier paper on the topic of defeating future hybrid threats and the US Army Profession published by the author in 2013 in the *Military Review*.³²

The first case study in this monograph is the Chinese Huai Hai Campaign (1948-1949) fought between President Jiang Jieshi's Chinese Nationalist Army and the Chinese PLA led by Chairman Mao Zedong. This case study will focus on Mao and his subordinate commanders' employment of the concept of people's war as they pondered the transition to phase three of the revolutionary war and the large-scale massing of guerilla units for conventional operations. In addition, this case study will explore Mao and his subordinate commanders' use of a hybrid mindset during the campaign that links back to the ancient Chinese concept of *shi* and a propensity based approach to war.

ANCIENT CONNECTIONS: MAO AND THE HUAI HAI CAMPAIGN

"The revolutionary war is a war of the masses; only mobilizing the masses and relying on them can wage it."

-Mao Zedong, Selected Works of Mao Tse-tung: Volume 1

Mao Zedong (*Mao Tse-tung*), the revolutionary Chinese Communist military commander, leader, and theorist, captured the essence of the idea of people's war. To Mao, revolution was the way to political and social transformation in China, and a war of the masses was the only way to a true revolution. Real power in China rested in the mobilization of the people, and the success of the revolution hinged upon it. Mao's concept of people's war completely changed the socially constructed reality of mid-twentieth century China. However,

³²Davis, "Defeating Future Hybrid Threats," 21-29.

can the method of thought in Mao's concept of people's war exhibit characteristics of the contemporary concept of hybrid warfare.

The purpose of this section is to explore the actions of Mao Zedong and his subordinate commanders, Su Yu and Liu Bocheng, during the Chinese PLA's Huai Hai Campaign (1948-1949) for the existence of hybrid warfare and a hybrid mindset. It will argue that the PLA's Huai Hai Campaign exhibited some characteristics of hybrid warfare, when viewed through a Chinese lens, and that Mao and his commander's operational approach to the campaign exhibited characteristics of a hybrid mindset. This section will present a campaign analysis of the Huai Hai Campaign and its linkage to ancient Chinese philosophy and military theory to uncover evidence of a hybrid way of thinking in this conflict. To conduct an analysis of this campaign, it is necessary to first understand the OEs and the socially constructed realities of the warring factions.³³ This context established their purposes for the Huai Hai Campaign and the ways to conduct it.

³³Berger and Luckmann, *The Social Construction of Reality*, 1, 23, 26-31.



Map 1. Eastern China Political Map

Source: Dr. Gary Bjorge, "Compound Warfare in the Military Thought and Practice of Mao Zedong and the Chinese People's Liberation Army's Huai Hai Campaign"

From 1921 to 1947, the Chinese Communist Party (CCP) engaged in a revolution to unite and free the common people of China under communist rule.³⁴ Political, economic, and social turmoil consumed China in the early decades of the twentieth century, and left a power vacuum in the country that warlords and imperialist powers vied to fill (see Map 1 for a visualization of the OE and political boundaries).³⁵ Under Mao Zedong's leadership, the CCP and PLA set out to seize this opportunity and establish Communist rule throughout all of China. From the outset, Mao and his followers faced a daunting task as they tried to establish revolutionary ideals in the peasant masses and defeat the Nationalist forces.

Mao initially, and successfully, focused his revolutionary operations on the hinterlands, leveraging Chinese peasants as a revolutionary power base.³⁶ However, the CCP's belief in, and strict adherence to the Russian/Marxist model in which the urban worker was the key to revolution, resulted in the defeat of Mao's forces. As he fought decisive positional battles for control of cities and influence over the urban working class masses, Mao lost his connection to the hinterland power base and failed to defeat the stronger Chinese Nationalist forces. In order to avoid ultimate destruction, Mao embarked on a 6,000-mile journey, known as the Long March, to establish a new base in northern China.³⁷ The trek significantly depleted Mao's resources and manpower, but continued Japanese offensive operations into Manchuria created a new cause and a new threat that Mao leveraged to inculcate renewed revolutionary fervor among the Chinese peasants for the CCP.

³⁴Gary Bjorge, *Moving the Enemy: Operational Art in the Chinese PLA's Huai Hai Campaign*, Leavenworth Paper (Fort Leavenworth: US Army Combined Arms Center Combat Studies Institute Press, 2003), 9.

³⁵Ibid., 9.

³⁶Ibid., 16.

³⁷Ibid., 16-17.

War with Japan created potential opportunities that Mao recognized and exploited. After the Long March and Japanese invasion, Mao, the CCP, and the PLA were at the edge of chaos. A new base of operations created an opportunity to regenerate strength in the mountains of northern China, but also susceptibility to defeat by the Nationalist and Japanese forces, in their weakened state. At this point, Mao developed the concept of people's war. In Mao's mindset, people's war encompassed creating civilian and military organizations that mobilized the potential power of Chinese peasant masses into formidable military forces.³⁸ In addition, Mao developed his concept of protracted war, which focused on a three-phased approach to revolutionary warfare.³⁹ Mao's innovations at the crossroads of reconsolidation or defeat are examples of Antoine Bousquet's idea of embracing complexity at the edge of chaos. Antoine Bousquet, a historian and international relations theorist, hypothesized that at "the edge of chaos" or "the narrow domain between frozen constancy and chaotic turbulence" is where complex adaptive structures develop and create lasting change. 40 Mao's concepts of people's and protracted war embraced complexity to create lasting change in China. In addition, they proved to be decisive against the Japanese invaders and created a relative position of advantage for the CCP and PLA in 1947, the second year of the Chinese Civil War.

The Nationalist forces, under the leadership of President Jiang Jieshi (*Chiang-Kai-shek*), were in a position of advantage throughout most of 1920s-1940s, relative to Chinese Communist forces and their capabilities. During the 1920s-1930s, Nationalist forces had Mao and his Chinese Communist forces in a strictly defensive posture, almost defeating them prior to Mao's Long

³⁸Bjorge, Moving the Enemy, 18-19.

³⁹Mao Zedong, *Selected Works of Mao Tse-tung*, vol. 2 (Peking: Foreign Language Press, 1965), 136-145.

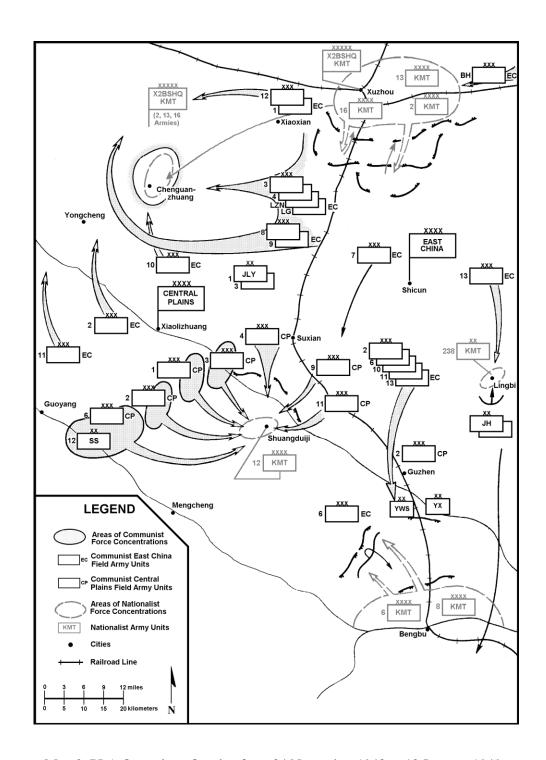
⁴⁰Antoine Bousquet, *The Scientific Way of Warfare: Order and Chaos on the Battlefields of Modernity* (New York: Columbia University Press, 2009), 177-178.

March.⁴¹ Following the defeat of Japanese forces in the summer of 1945, the Nationalist forces achieved a string of victories over the PLA during the latter half of 1946 and first half of 1947. The combined effects of these victories created another Nationalist position of relative advantage. Nationalist victories forced Mao and his Communists to lose control over 18 million Chinese people and 120,000 square miles of territory.⁴² Chinese Communist forces were now on the strategic defensive, but the last half of 1947 was a transition point in the Chinese Civil War. Nationalist's victories came at a heavy cost in both manpower and material. Furthermore, they were not decisive and failed to degrade Mao's power base in the hinterlands.⁴³ By 1947, however, Nationalist forces were now in a position of relative disadvantage. Conditions were ripe for a Communist counterattack that eventually shifted the initiative and advantage from the Nationalist forces to the PLA.

⁴¹Bjorge, *Moving the Enemy*, 10-11, 16-17.

⁴²Ibid., 38.

⁴³Ibid., 38.



Map 2. PLA Operations Overlay from 24 November 1948 to 10 January 1949

Source: Dr. Gary Bjorge, "Compound Warfare in the Military Thought and Practice of Mao Zedong and the Chinese Liberation Army's Huai Hai Campaign"

Mao and his subordinate commander, Su Yu, developed political and military aims, along with an ends, ways, and means analysis, focused on a holistic approach to the campaign in both ways and means. Their holistic approach also leveraged the propensity, or natural tendencies and potential, of the OE. Mao and Su's political aim of the campaign was to destroy Nationalist forces north of the Yangzi River in the central plains of China between the Yellow River and the Huai River in order to set conditions for the final defeat of Nationalist forces.⁴⁴ The reduction of Nationalist presence in the central plains would link base areas together and enable more cooperation between the PLA's East China Field Army (ECFA) and Central Plains Field Army (CPFA).⁴⁵ Su Yu, commander of the EFCA and arguably the PLA operational artist in this campaign, developed a military aim to destroy the Seventh National Army, along with any additional Nationalist forces brought to bear in the engagement, and seize the city of Xuzhou, which was critical to the linkage of base areas. 46 The optimal way for Su Yu to achieve this military aim was by encircling and then annihilating the Nationalist forces after allowing their natural propensity to maneuver them into pockets of isolation (see Map 2 for a graphic depiction of PLA maneuvers).⁴⁷ Su waged Mao's concept of people's war and systemically used varying combinations of the available means of main and regional forces, concentrated guerilla forces, militia self-defense forces, and the mobilized masses of Chinese peasants to accomplish his military aim. 48 Mao and Su's desired strategic end state of this campaign was the destruction of all Nationalist forces in the Chinese central plains region and the establishment of a Xuzhou base

⁴⁴Bjorge, *Moving the Enemy*, 48-49.

⁴⁵Gary Bjorge, "Compound Warfare in the Military Thought and Practice of Mao Zedong and the Chinese People's Liberation Army's Huai Hai Campaign," in *Compound Warfare: That Fatal Knot*, ed. Thomas M. Huber (Fort Leavenworth: US Army Command General and Staff College Press, 2002), 178.

⁴⁶Ibid., 178-180.

⁴⁷Ibid., 180.

⁴⁸Bjorge, Moving the Enemy, 19.

of operations to coordinate missions between the ECFA and CPFA. This position of relative advantage would set the conditions for attacks south of the Yangzi River and the ultimate defeat of Nationalist forces.

Du Yuming, Jiang Jieshi's subordinate commander, developed military aims, along with an ends, ways, and means analysis, which failed to leverage China's true power base, the mobilized peasant masses, and failed to view the campaign from a holistic perspective. Jiang's overall political aims in the campaign were to "halt the rising tide of Communist victories and regain the initiative on the battlefield." In addition, he desired to halt "the Communists' southward expansion towards the Yangzi River valley." Du's military aim was to destroy Communist forces in the central plains region and effectively counter their tactics of achieving local superiority, isolating Nationalist forces, and then defeating them in detail. However, Du's operational approach focused on a traditional understanding of how to destroy the Chinese Communist forces without realizing that Mao had created a paradigm shift in Chinese warfare.

Du faced a significant quandary that is common when combating a hybrid foe – a strategy of mass versus a strategy of dispersion. In order to defeat Mao's Communist forces, Nationalist armies needed to disperse in an attempt to defend across a broad front. Dispersion, however, negated the Nationalist forces' ability to mass or concentrate firepower, as dispersed units were vulnerable to isolation and encirclement.⁵¹ Du decided to use a hammer and anvil approach to defeat Mao's forces. He focused on trapping Communist forces between the hammers, mobile maneuver forces, and anvils, forces in the defense, to isolate and then defeat Mao's forces in detail.⁵² In addition, Du task organized his forces to concentrate firepower for

⁴⁹Bjorge, *Moving the Enemy*, 77.

⁵⁰Ibid., 77.

⁵¹Ibid., 77.

⁵²Ibid., 77.

shaping anvil defensive operations and maneuver for decisive offensive hammer operations. However, his operational approach failed to defeat Mao's main strength, the mobilized peasant masses, and presented larger targets vulnerable to isolation and encirclement by Communist armies.

At the conclusion of the Huai Hai Campaign, Mao and his Communist forces achieved a decisive, crushing victory with far reaching consequences for China's Civil War. Communist forces destroyed five Nationalist armies, approximately 250,000 men, along with the seizure of substantial quantities of material and munitions.⁵³ Furthermore, Mao and his forces gained a physical position of relative advantage in China's central plains region. This position threatened the Nationalist capital of Nanjing and established a staging point for offensive operations into the Yangzi River Valley.⁵⁴ Although Mao and Su's strategy, operational approach, and execution of the Huai Hai Campaign achieved decisive results, can they shed light on contemporary hybrid warfare as well?

Dr. Gary Bjorge, a Chinese military historian, has stated, "The Huai Hai Campaign was compound warfare on a grand scale." Bjorge's compound warfare argument focused on Mao's "three-tiered structure for developing and employing military power." During the Huai Hai Campaign, the effects and efforts of regular and regional forces, self-defense militia, and Chinese peasants combined to create a decisive Chinese victory. Eventually, Bjorge expanded his argument to compare the contemporary concept of compound warfare as a parallel of Mao's

⁵³Bjorge, Moving the Enemy, 1.

⁵⁴Ibid., 1.

⁵⁵Bjorge, "Compound Warfare in the Military Thought," 178.

⁵⁶Ibid., 208.

concept of people's war.⁵⁷ It is here, under the cloak of Mao's concept of people's war, where elements of hybrid warfare exist in this campaign.

Mao's idea of people's war aligns with the essence of contemporary hybrid warfare. The US Army's TC 7-100, *Hybrid Threat*, says that "hybrid threats will use an ever-changing variety of conventional and unconventional organizations, equipment, and tactics to create multiple dilemmas" as a critical consideration when combating a hybrid threat. Similarly, Mao's concept of people's war was an ever-changing, transforming, and adapting combination of regular forces, irregular forces, militias, and mobilized civilians that posed significant quandaries for Nationalist forces, which they failed to overcome. In addition, US ADP 3-0, *Unified Land Operations*, currently defines a hybrid threat as, "the diverse and dynamic combination of regular forces, irregular forces, terrorist forces, criminal elements, or a combination of these forces and elements all unified to achieve mutually benefitting effects." Mao's concept of people's war definitely combined regular, irregular, and militia forces to achieve synergy, but what about the criminal elements component? There is no historical evidence that Mao's concept of people's war directly incorporated criminal elements. However, historical evidence does support the argument that another element of people's war filled that void or achieved the same result.

The functions and effects of mobilized Chinese peasant masses during the Huai Hai Campaign represented a 1948-1949 Chinese example of what contemporary criminal elements achieve for a hybrid threat. Criminal elements, within the contemporary hybrid threat construct, can engage in global criminal activities such trafficking and smuggling of drugs, weapons, and humans. Proceeds from these criminal activities can create capital for the training, equipping, and

⁵⁷Bjorge, "Compound Warfare in the Military Thought," 208.

⁵⁸Headquarters, Department of the Army, Training Circular (TC) 7-100, *Hybrid Threat*, 10.

⁵⁹Headquarters, Department of the Army, Army Doctrine Publication (ADP) 3-0, *Unified Land Operations*, 12.

manning of a hybrid threat.⁶⁰ During the Huai Hai Campaign, mobilized Chinese peasant masses performed functions that assisted with the training, equipping, and manning of Mao's forces. Men, women, and children, empowered with thoughts of Chinese revolutionary fervor, engaged in various forms of economic, political, social, and healthcare tasks. They recruited for the army, transported grain and ammunition, evacuated casualties, dug fortifications, built training bases, and inspired the continuation of the cause with personal sacrifices.⁶¹ Mao and Su's use of the concept of people's war in the Huai Hai Campaign represented the quintessence of hybrid warfare in a 1948-1949 Chinese context. However, people's war and the operational approach of Mao and Su were actually examples of a hybrid mindset in war with some of its origins in ancient Chinese philosophy and military theory.

Two components of the hybrid mindset are viewing a military campaign holistically and within current strategic context as part of the larger environmental system. During the campaign, Mao and Su's overall strategy and operational approach to the campaign exhibited these elements of the hybrid mindset. Su's idea to force or allow the Nationalist forces to maneuver into pockets of isolation, which would enable their eventual encirclement and annihilation, reflected a firm understanding of the larger campaign/environmental system. This idea also countered and then exploited the Nationalist's hammer and anvil strategy. In addition, Mao's concepts of people's war and protracted war, the foundation of the means and their ways of employment in the Huai Hai campaign, was a concept Mao developed at the edge of chaos in relation to the context of the ongoing Chinese Civil War.

In his work, *Problems of Strategy in Revolutionary China*, Mao highlighted that China was a semi-feudal and semi-colonial country that would have to wage a version of revolutionary

⁶⁰Davis, "Defeating Future Hybrid Threats," 22.

⁶¹Bjorge, *Moving the Enemy*, 19; Bjorge, "Compound Warfare in the Military Thought," 213.

war within its special context; not the Russian model.⁶² In addition, Mao argued, "Any war situation which acquires a comprehensive consideration of its various aspects and stages forms a war situation as a whole."⁶³ His statement alluded to the importance of viewing strategy holistically, and focused on a synthesis of all the variables in a war. This synthesis must occur in the mind and mindset of the military commander. Mao made this connection when he stated that "for what pertains to the situation as a whole is not visible to the eye, and we can understand it only in the mind," and emphasized the importance of being good at learning.⁶⁴ People's war was a logical outgrowth of Mao's thought process on context, thinking, and learning.

Another component of the hybrid mindset is its search for potential opportunities, or possibilities that can become opportunities, instead of focusing on existing opportunities to exploit. Exploiting potential opportunities links back to Sun Tzu and the ancient Chinese concept of *shi*. Sun Tzu, an ancient Chinese military commander and theorist, postulated, "The expert in battle moves the enemy and is not moved by him." Gary Bjorge described Sun Tzu's statement as, "the ability to look ahead, to visualize the possibilities inherent in the flow events, to shape the events so possibilities become opportunities, and to grasp those opportunities for one's benefit." Bjorge's statement explains the essence of the hybrid mindset this monograph is proposing.

In addition, Gary Bjorge's thoughts explained what PLA commanders Su Yu and Liu Bocheng were attempting to achieve in the Huai Hai Campaign. Their presentation of forces within the context of the larger environment transformed potential opportunities to move the 7th

 $^{^{62}\}mbox{Mao}$ Zedong, Selected Works of Mao Tse-tung, vol. 1 (Peking: Foreign Language Press, 1965), 179-180.

⁶³Zedong, Selected Works of Mao Tse-tung, vol. 1, 183.

⁶⁴Ibid., 185, 186-191.

⁶⁵Sun Tzu, *The Art of War*, trans. Samuel B. Griffith (New York: Oxford University Press, 1971), 96. Note: adjusted for grammar and syntax.

⁶⁶Bjorge, Moving the Enemy, 246.

and later the 12th Nationalist Armies into real pockets of isolation.⁶⁷ After isolating the two Nationalist armies, the CPFA and ECFA defeated them in detail through encirclement and annihilation. As Sun Tzu proposed, Su and Liu's actions "created a situation to which he [the enemy] must conform; they enticed him with something he was certain to take, and with the lures of ostensible profit they awaited him in strength."⁶⁸ In essence, they moved the enemy and did not allow the enemy to move them.

Ultimately, the essence of these actions and statements came from the ancient Chinese concept of *shi*. *Shi* focused on understanding the propensity or existing energy and momentum within a system. ⁶⁹ David Lai, an international relations professor at the US Air War College with an emphasis in Chinese studies, argued that *shi*, when applied to the Chinese game of go (*weiqi*), focused not on the distinct material capabilities of each game piece. Instead, *shi* analyzed the "intangible and potential power" of each piece "based on the near-infinite combinations and alternative ways of engagement." ⁷⁰ Go, a game of strategic encirclement, focused on strategy and the infinite combinations of pieces. ⁷¹ In this game, a player does not search for a decisive battle or attack the enemy's COG. ⁷² Instead, a player uses the boundless creativity of the human imagination to maneuver in empty spaces on the go board that gradually negates the strategic potential the opponent's pieces. ⁷³ From this lens, the use of pieces was contextual and the number of different combinations was limitless.

⁶⁷Bjorge, Moving the Enemy, 246.

⁶⁸Tzu, *The Art of War*, 93. Note: adjusted for grammar and syntax.

⁶⁹Bjorge, Moving the Enemy, 247.

⁷⁰David Lai, "Learning from the Stones: A Go Approach to Mastering China's Strategic Concept, Shi" (monograph, US Army War College Strategic Studies Institute, 2004), 27.

⁷¹Ibid., 6.

⁷²Ibid., 6.

⁷³Lai, "Learning from the Stones," 7; Henry Kissinger, *On China* (New York: Penguin Books, 2012), 23.

When applied to military operations, François Jullien related *shi* to potential originating from variances in the disposition of forces. François Jullien, a French Sinologist and theorist of efficacy and propensity, explained how true military propensity emerges from "potential born of disposition," and continually modifying a military force's disposition as the OE develops to create more potential.⁷⁴ This military application of propensity direct aligns with the actions of Mao, Su, and Liu during the campaign. These concepts possess significant implications for the development of a hybrid mindset and its application in US Army operational art.

Mao Zedong, the CCP, and the PLA achieved a decisive, far-reaching victory in the 1948-1949 Huai Hai Campaign. Mao's victory destroyed five Nationalist armies, secured freedom of maneuver in the central plains of China, and set the conditions for offensive operations south of the Yangzi River. Critical to Mao and his subordinate commanders' victory were their strategy, operational approach, and execution of the Huai Hai Campaign. A central part of Mao's strategy and operational approach was the concept of people's war. This 'people's war' applies to Thomas Huber's concept of compound warfare and, after further exploration, reflects the contemporary concept of hybrid warfare. However, and more importantly, the thoughts and actions of Mao and his commanders support the existence and development of a hybrid mindset with some of its origins in ancient Chinese military theories and philosophies. The crux of this mindset is using context and a holistic view of a military campaign as part of a larger system to cultivate and then exploit propensity and potential opportunities in that environment.

The second section of this monograph is now going to explore the Peninsular (1807-1814) for the existence of hybrid warfare and the hybrid mindset from a European context.

Specifically, Wellington and his conceptualization, planning, and execution of the Lines of Torres

Vedras (1809-1811) during the defense of Portugal will provide insight into how the hybrid

⁷⁴François Jullien, *The Propensity of Things* (New York: Zone Books, 1995), 27.

mindset contributed to the Spanish Ulcer that Napoleon and his subordinate commanders could never cure.

MANAGING COHERENCE AND COMPLEXITY: THE LINES OF TORRES VEDRAS

"The Peninsular War (1808-1814, British vs. French in Spain and Portugal) should be carefully studied to learn all the obstacles which a general and his brave troops may encounter in the occupation or conquest of a country whose people are all in arms."

—Antoine-Henri Jomini, *The Art of War*

"As a soldier, preferring loyal and chivalrous warfare to organized assassination, if it be necessary to make a choice, I acknowledge that my prejudices are in favor of the good old times when the French and English Guards courteously invited each other to fire first,—as at Fontenoy,—preferring them to the frightful epoch when priests, women, and children throughout Spain plotted the murder of isolated soldiers."

—Antoine-Henri Jomini, The Art of War

The Peninsular War was an armed struggle that perplexed and beguiled Napoleon and his proud legions in ways that he had never previously experienced. The cumulative efforts of British, Spanish, and Portuguese regular forces, along with Spanish and Portuguese guerillas, had a devastating effect on Napoleon Bonaparte and his conventional nineteenth-century warfare minded compatriots. During the six-year war, the French narrative became the story of a conquering and occupying force in a country where the populace engaged in people's war. Similar to Mao's concept of people's war and its impact on the Huai Hai Campaign, the combined effects of citizen "guerillos" and "ordenanzas" armed to the knife, refusing to accept defeat, and fighting to the death wove a "fatal knot" that Napoleon and his subordinate commanders failed to unravel, or cut.⁷⁵

This monograph's second section will examine the Peninsular War (1807-1814) for the presence of hybrid warfare. More specifically, it will explore the actions of the Duke of Wellington, Field Marshal Arthur Wellesley, during the conceptualization, planning, and

⁷⁵Cited in John Tone, *The Fatal Knot* (Chapel Hill: The University of North Carolina Press, 2005), 3.

execution of the Lines of Torres Vedras (1809-1811) for the manifestation of a hybrid mindset. This section will argue that the Peninsular War exhibited some characteristics of hybrid warfare, from a nineteenth century perspective, and Wellington's operational approach to the Lines of Torres Vedras exhibited some characteristics of a hybrid mindset. Furthermore, this study of the Lines of Torres Vedras will explain how Napoleon and Marshall André Masséna, the Commander of the French Army of Portugal in 1810 and leader of the third French invasion of Portugal, failed to grasp the mindset. This section will present a campaign analysis of the Lines of Torres Vedras, and focus on managing the tension between coherence and complexity in an operational approach to uncover a hybrid mindset, or way of thinking, in this conflict. During the Lines of Torres Vedras, Wellington's understanding of context, development of a holistic, propensity based approach to the campaign, and incorporation of complexity at the edge of chaos to rearrange the presentation of his forces and the terrain, reflected the use of a hybrid mindset. Similar to the Huai Hai Campaign, to conduct an analysis of the Lines of Torres Vedras, it is necessary to first internalize the OEs and socially constructed realities of the belligerents.⁷⁶

In August 1808, the British Army, initially under the command of Wellington and later Sir John Moore, deployed to the Iberian Peninsula in support of Portugal and its defiance of Napoleon's Berlin Decrees, which forbid any country in Europe from trading with Britain. ⁷⁷ In addition, the British viewed an intervention on the Peninsula as a means to further undermine Napoleon and the French in their attempts to dominant all of the Europe through the Continental System. Wellington's initial military actions in Portugal achieved success at the tactical level during his offensive operation to seize Lisbon. During the attack, Wellington compelled one of General Jean-Andoche Junot's, the first commander of the French Army of Portugal, units to

⁷⁶Berger and Luckmann, *The Social Construction of Reality*, 1, 23, 26-31.

⁷⁷Julian Paget, Wellington's Peninsular War: Battles and Battlefields (London: Leo Cooper, 1990), 4.

withdraw from their blocking position of a main axis of advance to Lisbon. This result achieved a position of relative advantage for the British and an opportunity for them to continue the attack to seize Lisbon while Junot's units were attempting to reposition and reorganize. However, ineffective guidance during the transition in overall operational command of the British Army to Moore squandered this opportunity. During the tactical pause in operations, Junot proposed an armistice under conditions that benefited France. Two of Moore's subordinate commanders accepted the terms and signed the contentious Convention of Cintra. They compelled Wellington to sign the documents, as well. These documents removed Junot's Army from Portugal, but the terms of surrender allowed Junot and his army to leave without a designation as prisoners of war. Under nineteenth century rules of war, this allowed Junot's forces to fight the British another day on future battlefields in Europe. Furthermore, these documents allowed Junot and his men to leave Portugal with their spoils of war, and provided them transportation back to France on British ships. Ultimately, the terms of the Convention of Cintra sent Wellington home to Britain in shame and left Moore in sole command of the British Army.

After Wellington left the Iberian Peninsula, the operational situation changed considerably. As Commander of the British Army, Moore attacked towards Spain to defeat follow on French forces, and further secure the independence of Portugal. However, Moore had to abandon this course of action after discovering Napoleon and his Grand Army were in Spain. Napoleon was now in direct operational and tactical control of French forces on the Peninsula, as well.⁸¹ Moore fought a series of delaying battles in order to re-embark the British Army on landing ships and save it from capture and destruction. During one of the last delaying actions at

⁷⁸Philip Haythornthwaite, *Wellington: The Iron Duke* (Washington, DC: Potomac Books, 2007), 25.

⁷⁹Ibid., 26.

⁸⁰Paget, Wellington's Peninsular War, 15.

⁸¹ Haythornthwaite, Wellington: The Iron Duke, 28.

Corunna, Moore lost his life. Prior to his death, Moore sent correspondence home describing how the British Army could not effectively defend Portugal. This document created a serious cognitive obstacle in the minds of British military and civilian leaders on the future of operations on the Iberian Peninsula. At the end of 1808 and beginning of 1809, the British found themselves in a physical and conceptual position of relative disadvantage. Wellington would have to contend with this contentious military and political environment during his second intervention on the Iberian Peninsula and the Lines of Torres Vedras.

In contrast to the British, the French socially constructed reality of 1807 and the early portion of 1808 was the narrative of a nation and Emperor on the rise. Napoleon, the soldier-statesman, was riding the momentum and reaping the benefits of a series of recent victories in Europe. Napoleon's defeat of Prussia, Austria, and Russia secured his, and France's, dominance over the European Continent. The Treaty of Tilsit, an alliance with the Tsar of Russia, and the transformation of Central Europe under Napoleon's Continental System changed the balance of power in the region and compelled France's adversaries to negotiated settlements on Napoleon's terms. However, Britain, the perfidious Albion, Portugal, Britain's oldest ally, and Spain, the Bourbon issue, still plagued Napoleon. In addition, strategic, military, and economic benefits made the conquest of Spain a very intriguing prospect for Napoleon.

⁸²W.F.P. Napier, *History of the War in the Peninsula and in the South of France from A.D. 1807 to A.D. 1814*, vol. 2 (New York: AMS Press, 1862), 340.

⁸³David Chandler, *The Campaigns of Napoleon*, vol. 1 (New York: Scribner, 1996), 593-594.

⁸⁴ Haythornthwaite, Wellington: The Iron Duke, 23.

⁸⁵David Gates, *The Spanish Ulcer: A History of the Peninsular War* (Cambridge: Da Capo Press, 2001), 5.

⁸⁶Rene Chartrand, *Spanish Guerrillas in the Peninsular War* (Oxford: Osprey Publishing, 2004), 3, 4.

⁸⁷Richard Sinnreich, "That Accursed Spanish War: The Peninsular War, 1807-1814," in *Hybrid Warfare: Fighting Complex Opponents from the Ancient World to the Present*, ed. Williamson Murray and Peter R. Mansoor (Cambridge: Cambridge University Press, 2012), 110.

This reality set the conditions for Napoleon to seize control of the Iberian Peninsula through intrigue and guile. Napoleon secretly orchestrated the approval to move forces through Spain to attack and seize control of Portugal by the Treaty of Fontainebleau. By October 1807, General Junot, in command of a French Corps of 25,000, was rapidly positioning forces throughout Spain for an attack on Lisbon. 88 On 13 December 1807, Junot marched the remainder of his now unopposed forces into Lisbon and seized control of Portugal. With Portugal now securely in his hands, after some minor uprisings, Napoleon turned his focus to the Spanish throne. Treacherously, he broke the Treaty of Fontainebleau with Spain and engineered the abdication of King Charles IV, along with the confinement of Prince Ferdinand, Charles's successor, to house arrest. 89 To complete the seizure of the Iberian Peninsula Napoleon installed his brother, Joseph Bonaparte, as the monarch of Spain. All seemed quiet on the Iberian Peninsula, but the enemy, or the people in this case, always has a vote as the classic military adage warns.

Carl von Clausewitz once argued, "Even the ultimate outcome of a war is not always to be regarded as final." Even though wars eventually end, conflict is transitory and continual as victory or defeat sets the conditions for continuation of conflict in other forms. For Napoleon and the French on the Iberian Peninsula, this was an unwelcomed truth. John Lynn, a military historian with an emphasis on early modern European studies, discussed the importance of honor, bravery, and chivalry in eighteenth and nineteenth century Europe. He alluded to a code of honor that guided warfare between countries by which the Army and people of a country would

⁸⁸ Gates, The Spanish Ulcer, 8.

⁸⁹Haythornthwaite, Wellington: The Iron Duke, 23.

⁹⁰Clausewitz, *On War*, 80, 595.

recognize and then accept defeat.⁹¹ The people of Spain and Portugal refused to honor these traditions and rose up against the French invaders and occupiers.⁹²

Although the Spanish lost over 54,000 men and four battles between January and March 1809, they continued to fight on and refused to accept defeat or subjection by the French.⁹³ During the occupation, conventional armies of both Spain and Portugal were never truly defeated. They continually reconsolidated and reorganized to fight another day. In addition, guerillas and ordenanzas executed irregular warfare operations that disrupted French lines of communication, ambushed small patrols, and forced French commanders to disperse their forces to counter the irregular forces threat. Eventually, the situation on the Iberian Peninsula worsened to the point that in November 1808 Napoleon, with over 200,000 troops of the Grand Army, attacked into the Iberian Peninsula to cure the Spanish ulcer once and for all.⁹⁴ Within a short amount of time, Napoleon routed any Spanish Armies that opposed him, had reconquered Madrid, firmly seated his brother as the monarch of Spain, and was in vigilant pursuit of Moore's British Army. 95 Believing that he had set the conditions for success in Spain, Napoleon left the Iberian Peninsula to attend to more pressing issues in central Europe in January of 1809. The task to defeat any remaining pockets of Spanish or Portuguese resistance on the Iberian Peninsula now fell to Joseph and his subordinate commanders. In essence, the end of 1808 and beginning of 1809 presented a cognitive and temporal position of relative advantage on the Iberian Peninsula for the French.

⁹¹John Lynn, *Battle: A History of Combat and Culture* (Boulder: Westview Press, 2003), 115, 140.

⁹²Chandler, *The Campaigns of Napoleon*, 610-611.

⁹³Paget, Wellington's Peninsular War, 21.

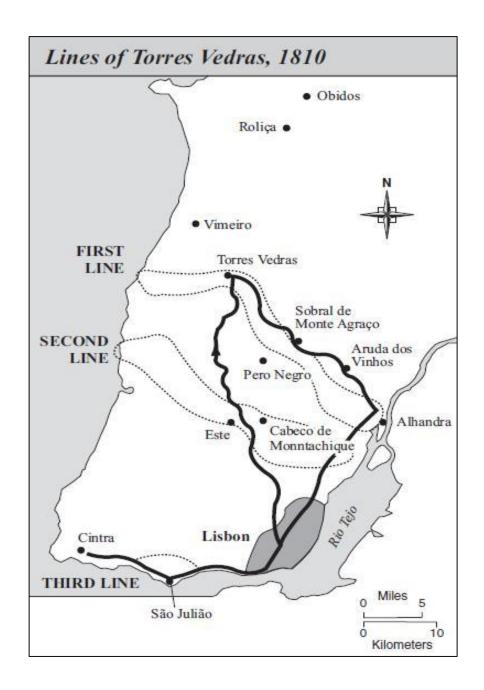
⁹⁴Ibid., 16.

⁹⁵ Haythornthwaite, Wellington: The Iron Duke, 28.

During the conceptualization and planning of the Lines of Torres Vedras, Wellington transformed political aims into military aims, along with an ends, ways, and means analysis, which embraced the context, propensity, and complexity of the OE. In June 1808, Lord Castlereagh, the British Minister of War, instructed Wellington to "support Spain and Portugal in throwing off the yoke of France, and the final and absolute evacuation of the Peninsula by troops of France." Prior to Wellington's second intervention on the Iberian Peninsula, Castlereagh advised Wellington "that the defense of Portugal you will consider as the first and immediate object of your attention." At the strategic/political level, Britain wanted to defend Portugal from the French, and to set conditions that would eventually help the Spanish and Portuguese permanently escape the wrath of Napoleon and France.

⁹⁶Paget, Wellington's Peninsular War, 11.

⁹⁷Huw Davies, *Wellington's Wars: The Making of a Military Genius* (New Haven: Yale University Press, 2012), 101.



Map 3. Obstacle Overlay of the Lines of Torres Vedras, 1810

Source: The Lines of Torres Vedras Website

From these strategic aims, Wellington, the operational artist in this campaign, derived a military aim focused on the defense of Portugal in a manner that would eventually set the conditions for offensive operations to help liberate Spain. The ideal way for Wellington to

accomplish this military aim was by executing an area defense, defense in depth, of Lisbon through the creation of the Lines of Torres Vedras. This was in order to prevent the French from seizing Lisbon and gaining control of Portugal (see Map 3 for a graphic representation of the Lines of Torres Vedras). In addition, Wellington estimated that his area defense of Portugal, along with continued Spanish conventional and guerilla resistance on the rest of the Iberian Peninsula, had the potential to attrite/exhaust the French forces past a certain threshold that would set the conditions for offensive operations into Spain. 98 For his area defense operations, Wellington used the available means of the Anglo-Portuguese Army (British and Portuguese regular forces), Spanish regular forces, the British Navy, Portuguese militia, Portuguese ordenanzas, and mobilized Portuguese citizens. At the conclusion of the campaign, Wellington envisioned a military end state consisting of the successful defense of Lisbon, which would prevent the French forces from reconquering Portugal. Furthermore, Wellington hoped that his larger strategy of attrition/exhaustion would establish a position of relative advantage for future offensive operations into Spain. 99

Marshall André Masséna developed military aims, along with an ends, ways, and means analysis that failed to incorporate the Iberian Peninsula's current strategic context and failed view operations on the peninsula from a holistic perspective. Napoleon's initial political/strategic aim for the Peninsular War was to seize, or conquer, Spain and Portugal in order to extend his Continental System and dominance of Europe to the Iberian Peninsula. In addition, the seizure of Portugal would ensure adherence to the 1806 Berlin Decrees and further interdict the British economy. With the seizure of Spain, Napoleon hoped to leverage its perceived material wealth,

⁹⁸Ian Fletcher, *The Lines of Torres Vedras 1809-11* (Oxford: Osprey Publishing, 2003), 25, 44; Davies, *Wellington's Wars*, 99-100.

⁹⁹Fletcher, The Lines of Torres Vedras 1809-11, 25, 44; Davies, Wellington's War, 99-100.

manpower resources (troops), and maritime assets to his advantage against the British.¹⁰⁰ Prior to the second invasion of Portugal, Napoleon's strategic/political aim shifted to crushing any remaining resistance (Spanish, Portuguese, or British), firmly establishing his brother's reign as the monarch in Spain, and setting the conditions to turn the Spanish and Portuguese into loyal subjects of the Empire.

Napoleon's strategic guidance set the conditions for Masséna's military aims, and an ends, ways, and means analysis. Prior to the third invasion of Portugal, Napoleon assessed that "Spain's continued resistance was due to Wellington's presence in Portugal and, determined to crush this interloper once and for all." In April 1810, Napoleon instructed Masséna to "drive the British leopards into the sea." This translated into a military aim for Masséna to invade Portugal to gain and maintain contact with the Anglo-Portuguese Army, and then destroy it. Characteristic of European warfare of the day, Masséna decided the best way to accomplish this military aim was by drawing Wellington's Anglo-Portuguese Army into a decisive battle where Masséna's numerical superiority would achieve decisive results. Masséna's available means for this decisive battle were upwards of 70,000 men and his desired end state was the destruction of Wellington's Anglo-Portuguese Army and the re-seizure/reconquering of Portugal.

Although sound judgment predicated Napoleon and Masséna's campaign plan, it failed to account for the strategic context of the Iberian Peninsula. Napoleon, famous for his prolific victories in central Europe, never regarded the war on the Iberian Peninsula "as being anything more than a sideshow." When viewed through this narrow lens, Napoleon failed to internalize

¹⁰⁰Sinnreich, "That Accursed Spanish War," 110; Gates, *The Spanish Ulcer*, 9.

¹⁰¹Gates, The Spanish Ulcer, 219.

¹⁰²Paget, Wellington's Peninsular War, 32.

¹⁰³Gates, The Spanish Ulcer, 236-237.

¹⁰⁴Fletcher, *The Lines of Torres Vedras 1809-11*, 5.

the vast problems inherent in the conquest of the Iberian Peninsula. Based on the principles of the French revolution, Napoleon assumed the citizens of two countries (Spain and Portugal) wrought corruption and a disproportionate distribution of wealth would be eager for social upheaval and revolution. However, Napoleon severely underestimated the conservatism of the Spanish, the dominant influence of Catholicism in the region, the national sense of honor of the Spanish and Portuguese, and their distaste for outsiders. This sense of honor and distaste for outsiders compelled the Spanish, and more specifically the Portuguese during the Lines of Torres Vedras, to refuse to accept defeat and to exhaust all possible measures in the protection of their existence. This failure to understand the context and true problem on the Iberian Peninsula, along with Napoleon's excessive overconfidence, placed the French in a position of relative disadvantage from the start.

In addition to failing to fully conceptualize the complex adaptive system of the Iberian Peninsula, Napoleon's policy of "divide and rule" amplified his position of disadvantage. His policy of divide and rule aligns with Lynn's paradigm of eighteenth and nineteenth-century European warfare, which focused on coherence and degrees of linearity. Napoleon deployed his forces on the Iberian Peninsula "so that each of his armies was virtually autonomous with its own commander" and therefore its own area of operations and mission set. However, this policy negated his ability to combine, quickly rearrange forces, present his forces in a different manner to the adversary, and to exploit their holistic effect within the fluid conditions of the environment. Napoleon's policy of divide and rule was a significant detriment to Masséna's third invasion of Portugal. The resources available to Masséna in this endeavor greatly outnumbered

¹⁰⁵Gates, The Spanish Ulcer, 9.

¹⁰⁶Haythornthwaite, Wellington: The Iron Duke, 35.

¹⁰⁷Lynn, Battle: A History of Combat and Culture, 111-115, 120-121.

¹⁰⁸Haythornthwaite, Wellington: The Iron Duke, 35.

Wellington's Anglo-Portuguese Army, but the policy of divide and rule inhibited cooperation between French forces on the Iberian Peninsula and the potential effect of France's numerical superiority. ¹⁰⁹ Napoleon's policy embraced coherence, but lessened the potential advantage of embracing complexity in the coordination, cooperation, and presentation of forces.

At the conclusion of the Lines of Torres Vedras area defense, it was Wellington, not Masséna and Napoleon, that achieved decisive results. Wellington's Anglo-Portuguese Army successfully defended Lisbon and prevented Massena and the French from re-seizing or reconquering Portugal. The Lines of Torres Vedras was an impenetrable series of complex obstacles and redoubts that halted Masséna's attack for approximately six months from October 1810 to March 1811. In addition, Wellington's scorched earth policy forward of the Lines of Torres Vedras negated the French Army of Portugal's ability to forage and resupply off the land. Eventually, Masséna's position became untenable and he had to withdraw under constant harassment from Wellington's Army. At the end of his withdrawal, Masséna had lost upwards of 25,000 men consisting of 8,000 prisoners, 2,000 casualties, and 15,000 men that died from disease and starvation. Wellington's concept, design, and operational approach of the Lines of Torres Vedras achieved decisive results, but were they an example of contemporary hybrid warfare as well?

Thomas Huber argued that the Peninsular War was an example of "fortified" compound warfare. Huber based this premise on Wellington's employment and management of the interaction of regular and irregular forces on the Peninsula that produced a complementary effect. This complementary effect perplexed and frustrated the French, which eventually led to their

¹⁰⁹Haythornthwaite, Wellington: The Iron Duke, 35.

¹¹⁰Gates, The Spanish Ulcer, 236-238.

¹¹¹Ibid., 241.

defeat and withdrawal from the Iberian Peninsula. Huber's assessment may have some superficial merit, but the Peninsular War is better example of a hybrid warfare from a nineteenth century European context. In addition, the conceptualization, planning, and execution of the Lines of Torres Vedras were the most prominent example from the war of the essence of hybrid warfare.

Similarly, to Mao Zedong and Su Yu in the Huai Hi Campaign, Wellington leveraged the concept of people's war, from a European context, to achieve decisive results in during the Lines of Torres Vedras. 114 This European version of people's war in the Lines of Torres Vedras is where the essence of hybrid warfare emerged in the Peninsular War. Frank Hoffman once theorized, "Hybrid wars incorporate a range of different modes of warfare, including conventional capabilities, irregular tactics and formations, terrorist acts including indiscriminate violence and coercion, and criminal disorder." During the Lines of Torres Vedras, Wellington combined the effects of the Anglo-Portuguese Army, British Navy, the Spanish Army of Estremadura (regular forces), Portuguese militia and *ordenanza* (irregular forces), and the mobilized Portuguese masses for a common purpose. 116

Furthermore, Wellington used the Portuguese masses to achieve some of the functions and effects of criminal elements in a nineteenth century European context. Wellington compelled, convinced, and influenced the Portuguese peasants to construct and then defend the Lines of

¹¹²Huber, "Compound Warfare," 6; Thomas Huber, "Napoleon in Spain and Naples: Fortified Compound Warfare," in *Compound Warfare: That Fatal Knot*, ed. Thomas M. Huber (Fort Leavenworth: US Army Command and General Staff College Press, 2002), 91-92, 98.

¹¹³Sinnreich, "That Accursed Spanish War," 106-107, 139, 149.

¹¹⁴Max Boot, *Invisible Armies: An Epic History of Guerilla Warfare From Ancient Times to the Present* (New York: Liveright Publishing, 2013), 81, 82, 85, 90-91.

¹¹⁵Hoffman, "Conflict in the 21st Century," 14.

¹¹⁶John Grehan, *The Lines of Torres Vedras: The Cornerstone of Wellington's Strategy in the Peninsular War 1809-1812* (Staplehurst: Spellmount Limited, 2004), 193-196.

Torres Vedras.¹¹⁷ In addition to constructing and manning the lines, Wellington compelled the Portuguese people to make a tremendous sacrifice and destroy their land, homes, farms, mills, and road network, essentially the foundations of their lives and economy, in support of his scorched earth policy.¹¹⁸ The actions of the Portuguese masses reflect how contemporary criminal elements of a hybrid threat support the establishment of training bases, sanctuaries, and recruiting for regular and irregular forces. In the purest form, the Portuguese masses provided resources, not in the form of capital from global criminal activities, but in the form of human capital to support the cause.

Transcending the idea of hybrid warfare, Wellington's conceptualization, planning, and execution of the Lines of Torres Vedras truly reflect an example of the hybrid mindset in warfare. A main characteristic of his hybrid way of thinking was understanding the current context and socially constructed reality of the strategic environment. During his design and planning of the Lines of Torres Vedras, Wellington leveraged his understanding of the larger context of the Peninsular War. He understood that the nature of the war was different for different actors. For the British, the war represented an opportunity to contain and drain the France's overall strength. However, he also internalized that, for the Spanish and Portuguese, the war was a struggle for survival of their respective nations and the preservation of their ways of life. 119 In addition, Wellington understood and managed the current British civil-military relationship. During the Peninsular War, Wellington carefully navigated the "muddy waters that surrounded Britain's strategic political objectives, and exercised his discretion in negotiating them." 120 Wellington's discretion resided in the realization that he commanded the only army that Britain currently

¹¹⁷Fletcher, The Lines of Torres Vedras 1809-11, 22-23.

¹¹⁸Ibid., 24-25.

¹¹⁹Davies, Wellington's Wars, 113.

¹²⁰Ibid., xii.

possessed and that created operational level risk for pursuing offensive operations.¹²¹ Wellington knew that he could defeat the French on battlegrounds of his choosing, but the cost to his army, relative to the larger French forces, would not be worth the benefits.

Within the strategic context of the Iberian Peninsula, Wellington developed a holistic operational approach with the Lines of Torres Vedras focused on the propensity and potential opportunities within the Iberian Peninsula. These characteristics are some additional parts of the hybrid mindset. Wellington adopted a defensive strategy centered on attrition/exhaustion of any attacking French forces. Realizing that lighting strikes against French forces would produce tactical successes, but not translate into a strategic victory, Wellington devised the Lines of Torres Vedras as a way to defeat and then repel another French invasion of Portugal.

Using the propensity of the French Army's search for a decisive battle, Wellington would entice them into a position of isolation and relative disadvantage in front of the Lines of Torres Vedras. Once in position, his scorched earth policy, coupled with the French over extended lines of supply, would eventually starve and attrite/exhaust their attacking forces. When the French position became untenable, their withdrawal would become inevitable. In his Memorandum on the Defense of Portugal and subsequent Memorandum for Lieutenant Colonel Fletcher, Wellington outlined his thoughts on how to defend Portugal and construct the Lines of Torres Vedras, respectively. These documents reflect Wellington's internalization of what François Jullien would much later explain as military propensity. Wellington's "potential born

¹²¹Paget, Wellington's Peninsular War, 34.

¹²²Davies, Wellington's Wars, 118.

¹²³Arthur Wellesley, Duke of Wellington 1769-1852, *The Dispatches of Field Marshall the Duke of Wellington: K. G. during his Various Campaigns in India, Denmark, Portugal, Spain, the Low Countries, and France. From 1799 to 1818*, New Edition (London: J. Murray, 1836-1839), vol. 4, 261-263; vol. 5, 234-239.

¹²⁴Jullien, *The Propensity of Things*, 27-28.

of disposition" enticed Masséna's forces to maneuver into a physical and cognitive position of relative disadvantage where they could no longer resist his will.¹²⁵

Another component of the hybrid mindset Wellington exhibited was in the way he embraced and managed complexity. Wellington's holistic approach focused on propensity and potential opportunities, which allowed him to embrace complexity on the verge of defeat to a numerically superior French force, and to modify the presentation of his forces within the surrounding terrain. 126 He envisioned the transformation of the terrain surrounding Lisbon from a series of rolling hills into an impregnable series of mutually supporting redoubts along the most likely enemy avenues of approach. 127 In order to accomplish this, he compelled the Portuguese people to construct the defensive lines and then execute a scorched earth policy in front of them. 128 During the execution of actual defensive operations, instead of using his Anglo-Portuguese Army for the main defenses, Wellington primarily used his Portuguese militia and ordenanza to occupy the static redoubts of the main defensive belts. This allowed Wellington to use his conventional Anglo-Portuguese Army as a maneuver element to plug holes during an attack. 129 This tactic went against conventional wisdom of the day by using the majority of his least capable forces in the primary defensive lines. Lastly, Wellington used the British Navy to patrol the Tagus River in order to prevent any French attempts to envelope his defensive lines, and to resupply the British Army in Lisbon. Overall, Wellington's presentation of the terrain and

¹²⁵Jullien, *The Propensity of Things*, 27-28.

¹²⁶Bousquet, The Scientific Way of Warfare, 173-178.

 $^{^{127}}$ Wellesley, Duke of Wellington 1769-1852, *The Dispatches of Field Marshall the Duke of Wellington*, vol. 5, 234-239.

¹²⁸Gates, The Spanish Ulcer, 220.

¹²⁹Haythornthwaite, Wellington: The Iron Duke, 33-34.

forces within the Lines of Torres Vedras dumbfounded Masséna and changed the calculus of his attack to re-seize Portugal. 130

The Peninsular War (1807-1814) was one of the catalysts that eventually resulted in the final defeat of Napoleon and his Grand Army. Ultimately, the war manifested into a seven-year disease that bled Napoleon and his proud legions dry. The actions of Wellington, his Anglo-Portuguese Army, and the mobilized Portuguese masses became part of the meta-narrative at the Lines of Torres Vedras. Their formidable and impenetrable defensive belts, along with a scorched earth policy, created time for a strategy of attrition/exhaustion to defeat Massena's French Army of Portugal. The 25,000 soldiers that Massena lost during his invasion set the conditions future operations into Spain and further exacerbated Napoleon's troubles on the Iberian Peninsula. At the core of this victory was the essence of hybrid warfare and Wellington's hybrid mindset. This mindset focused on understanding context, developing a holistic, propensity based approach to the campaign that exploited potential opportunities, and the incorporation of complexity at the edge of chaos to rearrange the presentation of his forces and the terrain.

The final case study of this monograph will examine the 2006 Second Lebanon War, fought between Hezbollah and Israel, for the existence of the hybrid mindset in a Middle-Eastern context. This war already holds the distinction of being one of the best representations of a hybrid threat and the manifestation of the concept of hybrid warfare. However, did Hezbollah and their commander's possess and utilize the hybrid mindset during their conceptualization of how to achieve a "Divine Victory" over the Israelis?

¹³⁰Gates, The Spanish Ulcer, 236.

CONTINUING RESISTANCE: NASRALLAH IN THE 2006 SECOND LEBANON WAR

"Hezbollah labels its endurance and survival in the face of Israeli attack a Divine Victory."

—William M. Arkin, *Divining Victory*

The Second Lebanon War (12 July 2006 – 14 August 2006), or the July War as it is known in Lebanon, represents one of the best and most recent examples of hybrid warfare and a hybrid threat. 131 During the war, Hezbollah combined conventional and irregular warfare operations with information-age guerillas armed with technologically advanced precision weapons to achieve decisive results in the 34-day conflict. Their hybrid way of thinking denied the IDF a rapid and decisive victory, extended the conflict in time and space, and resulted in a stalemate with no clear victor. As a result, multiple competing narratives of the war still exist. Hezbollah regarded the war as "A Victory from God" in an eternal struggle against the militarily superior Zionist adversary. 132 Israeli leadership, however, claimed a military and political victory by reducing the unchecked development of Hezbollah within southern Lebanon. 133

This section will analyze the war and the actions of Sayyed Hassan Nasrallah, Hezbollah's Secretary General, and Imad Fayez Mughniyah's, second-in-command of Hezbollah and the leader of Hezbollah's military wing in 2006, for the existence of a hybrid mindset, or way of thinking, in a Middle-Eastern context. It will argue that their conceptualization, design, and planning of a way to defeat and maintain offensive resistance against Israeli during a large-scale IDF offensive operation reflects the utilization of a hybrid mindset. Their hybrid way of thinking leveraged strategic context, a holistic approach focused on propensity (potential from disposition), and embraced complexity at the edge of chaos – into a broad operational concept of

¹³¹Headquarters, Department of the Army, Training Circular (TC) 7-100, *Hybrid Threat*, 9.

¹³²William Arkin, Divining Victory: Airpower in the 2006 Israel-Hezbollah War (Maxwell Air Force Base: Air University Press, 2007), xxv.

¹³³Ibid., 145-146.

continued resistance. In addition, this section will explain how LTG Dan Halutz, an Israeli Air Force (IAF) Officer who was a former Commander of the IAF and the Chief of Staff of the IDF during the war, developed a strategy and operational approach to the war based on a flawed strategic assessment to the IDFs detriment. Like campaign analyses of the Huai Hai Campaign and the Lines of Torres Vedras, it is important to first understand the meta-narratives and socially constructed realities of the warring factions. ¹³⁴ These contextual realities of Hezbollah and Israel established their purposes for going to war and the possible military ways to achieve them.

From its inception, Hezbollah, or "the Party of God," has always been a Shiite-Islamic organization founded on an eternal struggle to defeat the West, mainly Israel and the United States. Iran's radical Shia-Islam doctrine and Syria's close collaboration also created a guiding force for Hezbollah's modus operandi. Hezbollah was born from the relatively large, but poor and unrecognized population of Shia Muslims in southern Lebanon. In addition to containing a disenfranchised segment of the population, Lebanon has always been a battleground and an area of conflict where multiple internal and external actors have vied for dominance. These conditions created a perfect storm for the creation of Hezbollah as a radical movement countering the marginalization of Shia Muslims in southern Lebanon. The organization, initially focused on terrorism as an expression of its strategy, became a logical way for numerous Shia Muslims to vent their anger and frustrations due to their plight in Lebanon and the Middle East. Their basic and fundamental doctrine since the 1980s had been unending struggle to annihilate Israel and liberate Jerusalem. This struggle also entailed intense hostility towards the United States and a

¹³⁴Berger and Luckmann, *The Social Construction of Reality*, 1, 23, 26-31.

¹³⁵ Israeli Intelligence and Terrorism Information Center at the Center for Special Studies, Hezbollah (Part 1): Profile of the Lebanese Shiite Terrorist Organization of Global Reach Sponsored by Iran and Supported by Syria, Special Information Bulletin (Tel Aviv: Israeli Center for Special Studies, 2003), 8; Gilbert Achcar and Michel Warschawski, The 33-Day War: Israel's War on Hezbollah in Lebanon and Its Consequences (Boulder: Paradigm Publishers, 2007), 20.

¹³⁶Achcar and Warschawski, *The 33-Day War*, 1, 17.

desire to dominant the Middle East.¹³⁷ Hezbollah desired to establish an Islamic Republic ruled by *Sharia* Law, within Lebanon. By 1990, however, internal and external conditions in Lebanon and the Middle East region forced Hezbollah to adjust their organizational culture and structure to maintain relevance.

In a struggle to adapt, Hezbollah effectively transitioned from an organization focused solely on radical Shiite-Islamic doctrine and terrorism to an organization focused on resistance. During the 1990's, Hezbollah began to integrate into the larger framework of the Lebanese state system. They initiated a process of "Lebanonization" focused on transforming the organization from a radical terrorist organization into more of a social movement that participated in the Lebanese political and social arena. Hezbollah naturally grew political, social, and judicial wings. Overtime, the growing integration of Hezbollah into the Lebanese state apparatus resulted in the official acceptance of its military wing into Lebanon's defense establishment and its strategy against Israel. The military wing of Hezbollah transitioned from a force focused on acts of terror into a balancing element in deterrence vis-à-vis Israel, and a "smart weapon" that Lebanon used to offset the weakness of its conventional forces. To expand this idea, Nasrallah constructed a strategic narrative in which Hezbollah was indispensable to the defense of Lebanon, an example of a forceful deterrent, and a form of continuing resistance to Israel's regional strategy. The Israeli's withdrawal from southern Lebanon in 2000, this manifestation of Hezbollah as a form of

¹³⁷Israeli Intelligence and Terrorism Information Center at the Center for Special Studies, *Hezbollah (Part 1)*, 1, 8.

¹³⁸Daniel Sobelman, "Hizbollah - From Terror to Resistance: Towards a National Defence Strategy," in *Israel and Hizbollah: An Asymmetric Conflict in Historical and Comparative Perspective*, ed. Clive Jones and Sergio Catignani (New York: Routledge, 2010), 49.

¹³⁹Ibid., 49.

¹⁴⁰Ibid., 55.

¹⁴¹Ibid., 63.

deterrence and resistance against Israel helped set the conditions for the 2006 Second Lebanon War.

From the year 2000 until the war in 2006, Hezbollah used the temporal, physical, and cognitive space created by an Israeli withdrawal from southern Lebanon to prepare for their next confrontation. During this time, Hezbollah developed and then employed the concept of "the ontology of violence," or the logic and reality of violence, to continue deterrence and resistance against Israel. Between 2000 and 2006, Hezbollah abducted IDF soldiers, attacked IDF outposts, fired rockets on Israeli cities, and co-opted the Palestinians to commit terrorist acts to continue the struggle against Israel. 142 In addition, Hezbollah used support and resources from Iran and Syria to prepare for the next large-scale IDF offensive operation into Lebanon. Hezbollah focused its efforts on achieving strategic resilience through a combined offense-defense strategy. Offensively, they amassed a large rocket arsenal estimated at over 20,000 munitions. These rockets would allow Hezbollah to execute a sustained campaign of long-range fires to inflict continuous and massive damage to the Israeli homeland during future hostilities. 143 Simultaneously, Hezbollah developed a coordinated and well-planned area defense, defense in depth, of southern Lebanon to allow its military forces to survive, attrite, and eventually defeat an IDF offensive operation. This defense centered on pre-constructed fighting positions in urban terrain and trained guerrilla fighters with advanced weapons. 144 In essence, Hezbollah established a potential offense-defense balance of terror ready to defeat any new large-scale IDF attack.

Prior to the 2006 Second Lebanon War, Israel and the IDF perceived themselves to be in a position of relative advantage based on various regional events from 1999-2006. This position

¹⁴²Reuven Erlich, *The Road to the Second Lebanon War: The Lebanese Scene in the Years* 2000-2006, Summary Report (Tel Aviv: Israeli Intelligence Heritage and Commemoration Center, 2007), 11.

¹⁴³Ibid., 14-15.

¹⁴⁴Ibid., 14-15.

of advantage shaped and molded IDF thinking about the future of war in the Middle East and the Israeli military apparatus. United States wars in Kosovo (1999), Afghanistan (2001), and Iraq (2003), which exploited technologically advanced, precise, and lethal firepower (air and surface based), lead the Israelis to the conclusion that the proliferation of advanced military technology was revolutionizing ways to wage war in the future. This shift was towards network centric warfare and utilizing precision fires, predominantly air based, to defeat the will of an adversary to fight. 145 Most importantly, low level Palestinian resistance and acts of terrorism during the Second al-Aqsa Intifada (2000-2006) created a focus within the Israeli Army on stability, occupation, and counter-terrorism operations. With only low-level conflict on the horizon, senior IDF officials began to shift training, manning, and equipping within the Israeli Army towards stability operations, rather than combined arms maneuver and conventional warfare. 146 These conditions, combined with the enduring United States presence in Iraq, gave the Israelis a false sense of peace and security. They began to envision a Middle East region and world in which the era of major combat operations was over. In the future, Israeli military dominance, might, and superiority would deter any future adversaries from large-scale wars with Israel. The role of ground forces would now transition to low intensity peace-keeping/counter-terrorism type operations for the near future.¹⁴⁷

This confounding representation of the future Middle East security environment compelled IDF leaders to create and institutionalize a new strategic operational concept for future wars. They developed a new "conceptual framework for military thinking" focused on cognitive

¹⁴⁵David Johnson, "Hard Fighting: Israel in Lebanon and Gaza" (monograph, RAND, 2011), xvi, 31-32; David Johnson, "Military Capabilities for Hybrid War: Insights from the Israeli Defense Forces in Lebanon and Gaza" (occasional paper, RAND, 2010), 2.

¹⁴⁶Johnson, "Hard Fighting: Israel in Lebanon and Gaza," xvii, 39-40; Johnson, "Military Capabilities for Hybrid War," 2.

¹⁴⁷Johnson, "Hard Fighting: Israel in Lebanon and Gaza," xvii, 39-40; Johnson, "Military Capabilities for Hybrid War," 2.

concepts of "campaign rationale" and "consciousness burning." ¹⁴⁸ The overall purpose of this new doctrine was to create an innovative concept that attacked the underlying rationale of an adversary's system. Under the Systemic Operational Design (SOD) concept, military campaigns would now consist of leveraging "physical and cognitive appearances designed to influence the consciousness of the enemy rather than destroying it." ¹⁴⁹ Victory would become the result of strategic paralysis and a product of influencing "the rationale of an enemy system and paralyzing its motivation and ability to keep fighting." ¹⁵⁰ Although this paradigm shifting strategic operational concept possessed potential for future operations, the IDF's flawed assessment of the future security environment weakened the concepts merit, a failure that ironically was what SOD was supposed to overcome. Within this new operational framework, the main effort for IDF shifted to an emphasis on the tactical employment of standoff/long range fires by precision airpower instead of a combined arms approach.

In this new operational concept, the role of ground forces transitioned the Israel Army to a supporting effort and substantially subordinated role. They would now focus on irregular warfare, stability, occupation, and counter-terrorism operations similar to fighting the Intifada. In a resource constrained environment with reduced training funds and the primary allocation of defense spending on advanced technology air and surface based fires, many senior IDF officers began to believe that "fighting [the Intifada] was training." This misconception held by Israeli leaders resulted in a lacking of training on combined arms maneuver and conventional warfare

 $^{^{148}}$ Alon Ben-David, "Debriefing Teams Brand IDF Doctrine 'Completely Wrong," $\it Jane's Defence Weekly, 2007, 7.$

¹⁴⁹Ben-David, "Debriefing Teams Brand IDF Doctrine 'Completely Wrong," 7; Johnson, "Hard Fighting: Israel in Lebanon and Gaza," 28-31.

¹⁵⁰Dima Adamsky, *The Culture of Military Innovation: The Impact of Cultural Factors on the Revolution in Military Affairs in Russia, the US, and Israel* (Stanford: Stanford University Press, 2010), 106.

¹⁵¹Johnson, "Hard Fighting: Israel in Lebanon and Gaza," 40. Note: adjusted for syntax.

within the IDF. New Israeli recruits began to believe that the conflict in the territories was a valid representation of full-scale war.¹⁵² This skewed vision of future warfare, and an irregular warfare based operational concept, set the IDF up for failure in the 2006 Second Lebanon War.

Following the withdrawal of all IDF forces from southern Lebanon in 2000, Sayyed Hassan Nasrallah established political aims for any future large-scale confrontation with Israel within the region's strategic context. Although Nasrallah would remain eternally focused on the destruction of Israel, the liberation of Jerusalem, and defeating the US's goals within the Middle East region, he based his immediate political aim on the theme of continued resistance. Overall, Nasrallah desired to defend southern Lebanon from any Israeli attempts to re-seize the area in a manner in which the IDF would be unable to destroy, or defeat, Hezbollah. In addition, he desired to punish Israel for past atrocities against Shia Muslims in Lebanon and throughout the Middle East. In essence, Nasrallah wanted to achieve a Hezbollah victory in any future-armed conflict with Israel and to establish a capable deterrence that would permanently weaken Israeli resolve to attack into southern Lebanon ever again. 154

From these political aims, Sayyed Hassan Nasrallah and Imad Fayez Mughniyah derived a military aim, along with an ends, ways, and means analysis, for any future large-scale conflict with Israel. Their operational approach leveraged context, complexity, and propensity through modifications in the arrangement/disposition of Hezbollah's forces within the terrain of southern Lebanon. Nasrallah and Mughniyah's military aim was the successful defense of southern Lebanon in manner that Hezbollah was not defeated and established a credible deterrence to any future Israel interventions. An innovative way to accomplish this was the melding an offensive-

¹⁵²Amos Harel and Avi Issacharoff, 34 Days: Israel, Hezbollah, and the War in Lebanon (New York: Palgrave MacMillan, 2008), 35.

¹⁵³Anthony Cordesman, George Sullivan, and William D. Sullivan, "Lessons of the 2006 Israeli-Hezbollah War" (monograph, Center for Strategic and International Studies, 2007), 32-34.

¹⁵⁴Ibid., 34-35.

defensive strategy focused on an area defense, defense in depth, of southern Lebanon and an updated version of World War II's concept of a strategic bombing campaign. ¹⁵⁵ For their area defense operations, Nasrallah and Mughniyah used the available means of elite/regular Hezbollah fighters, village/irregular Hezbollah fighters, and peasants/Shia Muslim males in southern Lebanon "defending their country in the most tangible sense – their shops, their homes, even their trees." ¹⁵⁶ Their modified strategic bombing campaign used high technology rockets and missiles supplied by Iran and Syria to punish the Israeli population through barrages. At the conclusion of a large-scale future conflict with Israel, Nasrallah and Mughniyah envisioned a military end state consisting of the successful defense of southern Lebanon, which would prevent the Israelis from re-seizing the area. Furthermore, a failure of the IDF to decisively defeat Hezbollah, when coupled with a sense of fear and vulnerability throughout Israel from continual rocket barrages, would create a credible deterrence to any future Israeli aggression and help to deny their attainment of future strategic goals in the region.

LTG Dan Halutz developed an operational approach that leveraged technology and not the essence of SOD thinking. Ehud Olmert, the Prime Minister of Israel during the 2006 Second Lebanon, established that the political/strategic aims of IDF military action were – the return of the abducted IDF soldiers, destruction of Hezbollah, compelling of Lebanon to act as an accountable state with regard to Hezbollah, and the strengthening of Israeli's deterrent against an attack within the region. ¹⁵⁷ In order to accomplish this political aim, Halutz crafted a military aim for the war that called for an attack into southern Lebanon to destroy Hezbollah and compel

¹⁵⁵Davis, "Defeating Future Hybrid Threats," 22-23.

¹⁵⁶Cordesman, Sullivan G., and Sullivan, W., "Lessons of the 2006 Israeli-Hezbollah War," 80-83; Russell Glenn, "All Glory is Fleeting: Insights from the Second Lebanon War" (monograph, RAND, 2012), 8-9; Arkin, *Divining Victory*, 25.

¹⁵⁷Cordesman, Sullivan G., and Sullivan, W., "Lessons of the 2006 Israeli-Hezbollah War," 6; Glenn, "All Glory is Fleeting," 4; Arkin, *Divining Victory*, 39.

Lebanon to become a more responsible actor with regard to Hezbollah. Halutz believed the optimal way to accomplish this was through an air campaign focused on attacking various military and civilian infrastructure targets that would compel Hezbollah and the Lebanese Government to Israel's will. The means available to Halutz to accomplish this were the Joint forces of the IDF, but employment of the IAF dominated initial planning efforts based on Olmert's guidance.

Initially, this tactical airpower centric approach achieved success by destroying a significant portion of Hezbollah's long and medium-range rocket capability during Operation Specific Gravity. 159 As Hezbollah's hybrid tactics expanded the conflict in time and space, however, this approach failed to neutralize the short-range Katyusha rocket threat or destroy a significant portion of Hezbollah's well-concealed defensive positions and forces. Eventually, Israeli political and military leaders decided to introduce ill-prepared ground forces into the war. Israeli Army efforts produced minimal success towards the end of the war by seizing some territory in southern Lebanon and destroying some Hezbollah fighters. Overall, neither airpower nor landpower fully achieved the Israeli political or military aims at the time of the United Nations (UN) cease-fire agreement.

Without a decisive victory for Israel and without the full achievement of their objectives, Israel searched for reasons why, after the conclusion of the war. To determine the source of failure during the war, Israel launched the Winograd Commission, headed by retired judge Eliyahu Winograd. In addition, this commission performed an in-depth analysis into the preparation and conduct of military and political officials during the war. A common theme in

¹⁵⁸Uri Bar-Joseph, "The Hubris of Initial Victory: The IDF and the Second Lebanon War," in *Israel and Hizbollah: An Asymmetric Conflict in Historical and Comparative Perspective*, ed. Clive Jones and Sergio Catignani (New York: Routledge, 2010), 149; Arkin, *Divining Victory*, 4-5.

¹⁵⁹Bar-Joseph, "The Hubris of Initial Victory," 149.

¹⁶⁰Glenn, "All Glory is Fleeting," 16.

their final report was that the IDF envisioned a flawed strategic assessment and narrative of future combat, predicated on their six years of experience with low-level conflict. Based on this assessment, they organized, trained, and equipped to primarily fight limited contingency operations, which represent a narrow portion of the spectrum of conflict/range of military operations. This manifested into a new IDF "operational concept that did not organize for the full gamut of challenges Israel could face." ¹⁶²

Although SOD's holistic and systemic approach to military operations possessed potential for IDF operations in any future conflict, a flawed strategic assessment created an overreliance on technology, especially airpower, within the new operational concept. Under modern constraints and limitations, it was extremely hard for tactically employed airpower and standoff fires to achieve decisive results alone. The idea that no silver bullets or extraordinary technological solutions exist in the human condition of war was a hard-learned lesson for the IDF. Halutz's airpower centric approach to produce an "image of victory" or a "spectacle of victory" by shaping the consciousness of Hezbollah and the Lebanese government was no different. A strategy of coercion, predominantly conducted with standoff fires, was difficult to execute because truly compelling an adversary to modify its course of action lies in how that target perceives the military action or threat of military action. In essence, effective coercion resides in the mind of the target. The Winograd Commission echoed this understanding when its final report stated, "more-identifiable targets in Lebanon did not either change Hezbollah's will to

¹⁶¹The Commission for the Examination of the Events of the 2006 Campaign in Lebanon (The Winograd Commission), *The Second Lebanon War: Final Report*, vol. 1 (Tel Aviv: Israeli Government, 2008), 315.

¹⁶²Ibid., 315.

¹⁶³Bar-Joseph, "The Hubris of Initial Victory: The IDF and the Second Lebanon War," 154, 156.

¹⁶⁴Robert Pape, *Bombing to Win: Air Power and Coercion in War* (Ithaca: Cornell University Press, 1996), 12-13.

continue firing at Israel or force the Lebanese government to constrain Hezbollah."¹⁶⁵ At a time when the IDF needed to abandon an existing theory of future wars focused solely on fighting the Intifada and low intensity conflicts, they were stuck in a cognitive rut.

During the 2006 Second Lebanon War, Hezbollah's hybrid nature destroyed the IDF's existing theory. Hezbollah's actions represented the epitome of Frank Hoffman's and US Army doctrine's concept of a hybrid threat. ¹⁶⁶ Throughout the war, Hezbollah melded regular forces, irregular village guards, and Shia peasants from southern Lebanon with advanced technology conventional weapons to present a lethal fighting force. ¹⁶⁷ Furthermore, Hezbollah utilized global criminal activities and elements, consisting of drug smuggling, money counterfeiting, and theft/fraud, to accumulate financial capital to further their cause. ¹⁶⁸ Hezbollah was definitely a hybrid threat. Arguably, Hezbollah remains the best contemporary example of a hybrid threat and the 2006 Second Lebanon War is the best example of a hybrid war, but is there more to this narrative. Like Mao and his subordinate commanders in the Huai Hai Campaign, and Wellington in the Lines of Torres Vedras, Nasrallah and Mughniyah's approach to future combat displayed characteristics of a hybrid mindset.

At the core of Nasrallah and Mughniyah's hybrid way of thinking was the concept and narrative of resistance. Nasrallah once stated, "The victory we are talking about is when resistance survives. When its will is not broken, then this is victory ... When we are not defeated

¹⁶⁵The Commission for the Examination of the Events of the 2006 Campaign in Lebanon (The Winograd Commission), *The Second Lebanon War*, 316.

¹⁶⁶Hoffman, "Conflict in the 21st Century," 14, 28; Headquarters, Department of the Army, Army Doctrine Reference Publication (ADRP) 3-0, *Unified Land Operations*, 13; Headquarters, Department of the Army, Training Circular (TC) 7-100, *Hybrid Threat*, 7.

¹⁶⁷Cordesman, Sullivan, G., and Sullivan, W., "Lessons of the 2006 Israeli-Hezbollah War," 80-83; Glenn, "All Glory is Fleeting," 8-10; Arkin, *Divining Victory*, 25-38.

¹⁶⁸Israeli Intelligence and Terrorism Information Center at the Center for Special Studies, *Hezbollah (Part 1)*, 9, 141-152.

militarily, then this is victory."¹⁶⁹ For Hezbollah, the idea of resistance, and enduring struggle, created an organizing logic for their military operations, and the organization at large. Nasrallah and Hezbollah's meta-narrative of resistance exuded a hybrid mindset. It incorporated an understanding of context, represented a holistic operational approach based on propensity, and embraced complexity at the edge of chaos to achieve a diving victory in the war.

Resistance incorporated a synthesis of the strategic context of Lebanon, Israel, and the Middle East region concerning future military operations. During previous relatively large-scale military clashes between Israel and Hezbollah, Operations Accountability (25-31 July 1993) and Grapes of Wrath (11-27 April 1996), Nasrallah and his followers gained intelligence on how the IDF would launch and execute an offensive operation into southern Lebanon. They utilized this information to construct an in-depth area defense of the area. In addition, they internalized the potential of continually firing Katyusha rockets into northern Israel, which the IDF was incapable of neutralizing or effectively countering. 170

These rocket barrages damaged Israeli civilian infrastructure and exploited the deep-seated civilian and military casualty aversion within Israel. Nasrallah explained this realization when he described Israel as owning "nuclear weapons and heavy weaponry," but in reality being "weaker than a spider's web." In his mind, the Israelis appeared strong on the surface, but were weak at the core. In addition, Nasrallah professed, "We [Hezbollah] have created a balance of fear by means of the Katyusha, which military science likens to a water pistol." This statement explained the potential impact of continually firing rockets at Israeli cities that the IDF could not neutralize. This situation came to fruition during the 2006 Second Lebanon War when Hezbollah

¹⁶⁹David Makovsky and Jeffrey White, "Lessons and Implications of the Israel-Hezbollah War: A Preliminary Assessment" (policy focus, The Washington Institute for Near East Policy, 2006), 9.

¹⁷⁰Sobelman, "Hizbollah - From Terror to Resistance," 55-59.

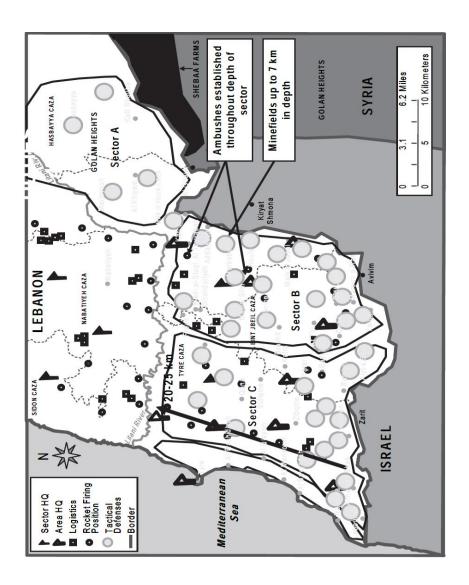
¹⁷¹Makovsky and White, "Lessons and Implications of the Israel-Hezbollah War," 11.

¹⁷²Sobelman, "Hizbollah - From Terror to Resistance," 55. Note: adjusted for syntax.

fired over 3,790 rockets into northern Israel, including 250 rockets on the final day of the war. Overall, these rockets killed 42 Israeli civilians, while wounding 4,262 Israeli civilians and instilling shock and anxiety in another 2,773.¹⁷³

When applied to conceptualizing ground military operations, resistance framed Nasrallah and Mughniyah's development of a systematic operational approach based the propensity of enduring struggle. Through the master plot of resistance, Nasrallah and Mughniyah continually rearranged their presentation of forces and equipment within the OE to innovate and create potential opportunities to exploit. As previously mentioned in this section, Nasrallah and Mughniyah successfully rearranged their operational form by melding regular and irregular forces with guerilla tactics and advanced technology conventional weapons. This mode of operations exploited the IDF's 2000-2006 pattern of training, manning, and equipping to fight Intifada type forces and low-level conflict in the future. Instead of fighting only armed rebels that would quickly disperse at the initiation of combat, the IDF fought regular and irregular forces armed with Anti-Tank Guided Munitions (ATGMs) that held terrain and defended it.

¹⁷³Cordesman, Sullivan, G., and Sullivan, W., "Lessons of the 2006 Israeli-Hezbollah War," 100, 103.



Map 4. Operations Overlay of Hezbollah's Defense of southern Lebanon Source: Matt Matthews, We Were Caught Unprepared: The 2006 Hezbollah-Israeli War

Prior to the deployment of their rearranged forces, Hezbollah also transformed the terrain of southern Lebanon and used civilian infrastructure and noncombatants to protect Hezbollah military forces, a tactic commonly referred to as operational shielding.¹⁷⁴ Hezbollah leveraged the

¹⁷⁴Cordesman, Sullivan, G., and Sullivan, W., "Lessons of the 2006 Israeli-Hezbollah War," 80-85; Headquarters, Department of the Army, Training Circular (TC) 7-100, *Hybrid Threat*, 34.

natural tendency of the IDF to attack along certain avenues of approach to development defensive positions and engagement areas (see Map 4 for a graphic representation of Hezbollah's defensive belts). They established complex defensive belts in southern Lebanon with fortified defensive positions, underground command nodes, and sustainment facilities. Along likely IDF avenues of approach, Hezbollah also developed engagement areas, ambush sites, and ATGM firing positions. ¹⁷⁵ In defiance of conventional logic, Hezbollah constructed their defensive and advanced technology weapon firing positions within civilian homes and buildings. Once shielded by civilian infrastructure, these positions were extremely hard for the IDF to destroy without large-scale collateral damage and associated international fallout. The Battle of Bint Jbeil, and Hezbollah's ability to damage over 40 IDF tanks during the war are examples of the effectiveness of these tactics. ¹⁷⁶ Overall, Hezbollah's area defense, defense in-depth, operations extend the conflict in time and space and disrupted IDF attempts to execute a rapid ground attack into southern Lebanon.

To incorporate the cognitive potential of outside actors, Hezbollah used the internet and media to conduct information operations exploit the world's view on perceived atrocities during the war. Hezbollah crafted a media narrative that Israel was targeting non-military targets consisting of hospitals, ambulances, schools, and mosques.¹⁷⁷ Images of collateral damage and civilian casualties in the international media reduced external support for Israel and helped to broker a UN resolution for a cease-fire of hostilities. By extending the conflict in time and space

¹⁷⁵Itai Brun, "The Second Lebanon War, 2006," in *A History of Air Warfare*, ed. John Andreas Olsen (Washington, DC: Potomac Books, 2010), 302.

¹⁷⁶Cordesman, Sullivan, G., and Sullivan, W., "Lessons of the 2006 Israeli-Hezbollah War," 107-112.

¹⁷⁷Arkin, *Divining Victory*, 75-77.

beyond the borders of Lebanon and the Middle East region, Hezbollah found another innovative way to achieve their goals during the war.¹⁷⁸

When combined, Hezbollah's tactical employment of forces and equipment achieved François Jullien's interpretation of military propensity, "potential born from disposition," and exploited potential opportunities with the operational environment. 179 Jullien's research expanded on the ancient Chinese concept of *shi* and concluded that true military propensity emerges from "potential born of disposition," and continually modifying your disposition as the OE develops to create more potential. 180 The disposition Jullien refers to in his explanation "includes the particular shape of the object ... as well as the situation at hand." 181 Hezbollah's rearrangement of the disposition of their forces, equipment, and the appearance of the terrain within the context of a shifting OE directly aligns with Jullien's concept. Furthermore, Nasrallah and Mughniyah's efforts to continually innovate and finds ways to continue resistance, reflects a desire to fight Israel on their own terms. It is a desire of Hezbollah to impose its way of war on the IDF, rather than the IDF imposing its way of war on Hezbollah. 182 The concept of fighting a battle on your own terms is not unlike the actions of Wellington and Mao, and Sun Tzu's ancient Chinese concept of moving the enemy, and not letting the enemy move you. 183

The last characteristic of Nasrallah's hybrid mindset possessed not only military, but also organizational implications. Throughout his tenure within Hezbollah and as its Secretary General, Nasrallah has embraced the nature of complexity and actually created change in order to operate

¹⁷⁸Peter Mansoor, "Introduction: Hybrid Warfare in History," in *Hybrid Warfare: Fighting Complex Opponents from the Ancient World to the Present*, ed. Williamson Murray and Peter R. Mansoor (Cambridge: Cambridge University Press, 2012), 15.

¹⁷⁹Jullien, *The Propensity of Things*, 27, 33-34.

¹⁸⁰Ibid., 27.

¹⁸¹Ibid., 29.

¹⁸²Cordesman, Sullivan, G., and Sullivan, W., "Lessons of the 2006 Israeli-Hezbollah War," 83.

¹⁸³Tzu, *The Art of War*, 93, 96.

at the edge of chaos. ¹⁸⁴ On numerous occasions since its conception, Hezbollah has been on the verge of extinction due to several geopolitical tremors within the landscape of Lebanese society. It has faced governmental pressure to disarm, withdrawal of direct Syrian oversight of the Lebanese Government, the assassination of key leaders, and IDF intervention, just to name a few. ¹⁸⁵ When faced with disaster, Nasrallah used the event as an opportunity to innovate and evolve. The narrative of resistance, process of Lebanonization, transformation of Hezbollah into a social movement for Shia peasants, and incorporation of Hezbollah into the Lebanese national defense structure represented Nasrallah's embracing of complexity to overcome adversity.

Israel's Intelligence and Terrorism Information Center has ominously described Hezbollah as "a multi-faceted organization with a variety of identities existing in a permanent state of tension." Dependent upon which lens an observer uses, Hezbollah can be a "dominant Shia political and social organization in Lebanon, a recognized political party, and a major nongovernmental faction in Lebanese society with an extensive social development program." Simultaneously, however, Hezbollah remains a powerful and relatively autonomous paramilitary organization with worldwide reach and terrorist roots. Throughout its history and emergence to a place of prominence within Lebanon, Hezbollah became the embodiment of a complex-adaptive system with "imperfectly overlapping circles and ideas that are constantly shifting." 188

¹⁸⁴Bousquet, *The Scientific Way of Warfare*, 177-178.

¹⁸⁵Sobelman, "Hizbollah - From Terror to Resistance," 62.

¹⁸⁶Israeli Intelligence and Terrorism Information Center at the Center for Special Studies, *Hezbollah (Part 1)*, 18.

¹⁸⁷Arkin, Divining Victory, 19.

¹⁸⁸Headquarters, Department of the Army, Training and Doctrine Command (TRADOC) Pamphlet 525-5-500: *Commander's Appreciation and Campaign Design* (Washington, DC: Government Printing Office, 2008), 7-8; Hussain Sirriyeh, "The Emergence of Hizbollah and the Beginnings of Resistance, 1982-85," in *Israel and Hizbollah: An Asymmetric Conflict in Historical and Comparative Perspective*, ed. Clive Jones and Sergio Catignani (New York: Routledge, 2010), 43.

The 2006 Second Lebanon War (12 July 2006 – 14 August 2006) represented a continuation of conflict between two forces, Israel and Hezbollah. Numerous lessons emerged from this 34 day armed struggle. One lesson centers on a skewed Israeli visualization of the future Middle East security environment. This visualization manifested into a flawed theory of future war. More importantly, however, this war was a lesson of Hezbollah, a dark horse in the region. In essence, the lesson was how Nasrallah and Mughniyah envisioned and created a future in which Hezbollah could achieve victory simply by not being defeated, and by creating uncertainty for the IDF because they changed their own patterns of behavior. At the core of this victory are the best example of contemporary hybrid warfare and the hybrid mindsets of Nasrallah and Mughniyah. Their hybrid way of thinking leveraged strategic context, a systematic approach focused on propensity (potential from disposition), and embracing complexity at the edge of chaos. This combination created a broad operational approach and meta-narrative of resistance that organized logic within Hezbollah and made the organization function as a complex adaptive system.

The final section of this monograph will explore common patterns of thought and behavior across its three case studies of what is a hybrid mindset, or way of thinking, based the supporting evidence. In addition, it will assess future implications of a hybrid way of thinking for the US Army and its operational planners as they prepare to combat hybrid threats of the future.

CONCLUSION: A THOUGHT PROCESS FOR INNOVATION AND TOWARDS A THOERY OF HYBRID

"The maximum use of force is no way incompatible with the simultaneous use of intellect."

—Carl von Clausewitz, *On War*

Clausewitz's powerful theory on the relationship between the maximum of use of military force and intellect represents the crux of this monograph. Since the 2006 Second Lebanon War, the actions of Hezbollah created discourse amongst the US DOD and academe

with regard to future wars and types of threats. The result of this debate was the emergence of the concepts of hybrid warfare and a hybrid threat. After eight years of analysis, however, these two concepts have varying degrees of acceptance within the US DOD and US Army doctrinal lexicon.

The US Army currently recognizes, accepts, and embraces the existence of a hybrid threat. It is a military actor, who synergistically combines the effects regular forces, irregular forces, and criminal elements in support of a common objective. This threat model currently serves as the basis for decisive action training environment scenarios at Army training centers and centers of excellence. Conversely, hybrid warfare is a concept that lacks full acceptance and inclusion in the US military lexicon. Consensus within the defense community currently explains hybrid warfare as the combination of other various forms of warfare, not a distinctly new form in and of itself. This monograph attempts to fill the void between varying views on the concepts of a hybrid threat and hybrid warfare. In addition, it is an initial effort towards developing a theory of the hybrid phenomenon, which explains the crux of a hybrid threat and hybrid warfare. The central argument of this monograph is that both concepts are not new, but are really examples of a hybrid mindset, or hybrid way of thinking.

A hybrid mindset focuses on the interaction of four mental characteristics to develop innovative and novel approaches to create desired operational environments. These four interacting characteristics are – understanding strategic context, a holistic approach to operations, internalization of propensity and potential opportunities, and embracing complexity at the edge of chaos. The three case studies of this monograph – the Huai Hai Campaign (1948-1949), The Lines of Torres Vedras (1809-1811) within the Peninsular War (1807-1814), and 2006 Second Lebanon War (July-August 2006) – uncover evidence from three different civilizations and time periods in history of the existence a hybrid mindset. In addition, the use of this hybrid way of thinking by certain commanders helped them develop innovative ways to achieve decisive results. True military operational level innovation requires a practitioner to see an OE through multiple

lenses, while simultaneously creating an overall synthesis of the various diverging perspectives.

A hybrid way of thinking can help US Army operational planners accomplish this in the future.

A campaign analysis of the Huai Hai Campaign (1948-1949) uncovered the existence of a hybrid mindset from an Eastern perspective. During the campaign, Mao Zedong and Su Yu exhibited characteristics of a hybrid mindset in their operational approach to the Huai Hai Campaign. A critical component of their hybrid way of thinking was Mao's concept of people's war, which embraced complexity at the edge of chaos to present an ever changing and rearranging presentation of regular forces, irregular forces, and mobilized peasant masses. This concept enabled Mao and his subordinate commanders to use context and a holistic view of a military campaign as part of a larger system to cultivate and then exploit potential opportunities in the OE.

Historical research traditionally categorized the Huai Hai Campaign and the concept of people's war as an example of compound warfare. However, Mao's concept of people war better represents a mid-twentieth century example of a hybrid threat and hybrid warfare, in which mobilized peasant masses achieved effects similar to contemporary criminal elements in the hybrid threat construct. People's war, facilitated a constant shift in Mao's presentation of forces which exploited and continually recreated *shi*, potential within the OE, and propensity, potential opportunities based on disposition. Overall, Mao and Su's operational approach leveraged Sun Tzu's ancient Chinese theory of moving the enemy, not allowing the enemy to move you. They allowed the *shi* and natural propensity of the Chinese Nationalist forces to maneuver them into positions of isolation during the Huai Hai Campaign. Once isolated and in a position of relative disadvantage, their eventual destruction by Chinese Communist forces became inevitable.

The Lines of Torres Vedras (1809-1811) exposed the existence of a hybrid way of thinking from a European lens. Similar to the Huai Hai Campaign, military historians traditionally regard the Peninsular War (1807-1814) as an example of compound warfare. During

the Lines of Torres Vedras, however, Wellington's use of people's war and the combined effects of the Anglo-Portuguese Army, British Navy, the Spanish Army of Estremadura (regular forces), Portuguese militia and *ordenanza* (irregular forces), and the mobilized Portuguese masses for a common purpose developed a nineteenth century example of a hybrid threat. Under this construct, the mobilized Portuguese masses achieved similar effects within the OE as contemporary criminal elements.

During his conceptualization and planning of the Lines of Torres Vedras, Wellington used a hybrid way of thinking to achieve decisive results. His thought process focused on understanding the larger strategic context of the Iberian Peninsula. Wellington realized that Portugal was just another theater of operations for the British in the ongoing struggle to defy French dominance of Europe, but a struggle of survival and existence for the Portuguese and the Spanish. An in-depth understanding of context empowered Wellington to develop a holistic, propensity-based approach to the campaign that exploited potential opportunities to defend Portugal and set conditions for offensive operations against the French. In addition, after the initial defeat of British forces in 1808, Wellington operated at the edge of chaos during his second intervention on the Iberian Peninsula. His rearranged presentation of forces and terrain during the area defense, defense in depth, of Portugal embraced complexity to achieve success. Wellington permitted Masséna's natural propensity to pursue a decisive battle, to maneuver the French Army of Portugal into a position of relative disadvantage in front his defensive belts. The defeat of Masséna and successful defense of Portugal was almost predetermined as environmental conditions – the lack of supplies, food for forage, and guerilla operations – naturally attrited and exhausted the French Army of Portugal.

The Second Lebanon War (12 July 2006 – 14 August 2006) case study, explored the existence of a hybrid mindset from a Middle-Eastern context. Military professionals, defense think tanks, and academics regard this war between the IDF and Hezbollah as the best

contemporary example of hybrid warfare and a hybrid threat. However, Nasrallah and Mughniyah's conceptualization, planning, and execution of operations during the war truly reflected a hybrid mindset within Hezbollah. Their hybrid way of thinking leveraged strategic context, a holistic approach focused on propensity (potential from disposition), and embraced complexity at the edge of chaos to develop a broad operational concept of continued resistance against Israel.

A campaign analysis of the 2006 Second Lebanon War revealed how this mindset and the concept of resistance translated into decisive operations on the ground. Context from Operations Accountability (25-31 July 1993) and Grapes of Wrath (11-27 April 1996) provided Nasrallah and Hezbollah with intelligence on how IDF would attack into southern Lebanon. In addition, these operations exposed an IDF weakness to rockets attacks and a sensitivity to sustained military and civilian casualties. Empowered with this knowledge, Nasrallah developed a holistic, propensity-based approach to any future military confrontations with Israel in southern Lebanon.

At the core of this approach was a strategy of offense-defense to maintain continual resistance against Israel. For offensive operations, Nasrallah and Mughniyah amassed a substantial arsenal of surface-to-surface rockets, and continually fired them into northern Israel during the war. Simultaneously, they established a well-prepared area defense, defense in depth, of southern Lebanon to defeat any IDF ground offensive and inflict further casualties on IDF forces. Nasrallah and Mughniyah's disposition of forces melded regular forces, irregular village guards, and Shia peasants from southern Lebanon with advanced technology conventional weapons. This different presentation of forces within the terrain of southern Lebanon extended the conflict in time and space and denied the IDF a rapid, decisive victory. In addition, Hezbollah's melding of different forms of warfare exploited the propensity of the IDF's preoccupation with irregular warfare and caught them unprepared to fight conventional, combined arms warfare. At the conclusion of hostilities, the lack of a decisive IDF victory, along

with enduring Hezbollah resistance and continuing rocket barrages, produced a narrative of a "Divine Victory" for Hezbollah.

To catch a thief, you must think like one. The logic of this common American saying is where the most significant implication of this monograph lies. If one of the greatest challenges of the current security environment is defeating future hybrid threats, then to defeat a hybrid threat US Army planners will have to think like one. A hybrid mindset, or way of thinking, will empower future Army planners with ways to counter or incorporate hybrid thinking into their operational approaches. The 2014 *QDR* highlights, "Innovation – within our own Department [US DOD] and in our interagency and international partnerships – is a central line of effort." It goes on to state, "We will actively seek innovative approaches to how we fight, how we posture our force, and how we leverage our asymmetric strengths and technological advantages." A hybrid mindset aligns with the current DOD focus as a cognitive tool to enable operational level innovation in the employment of military force and integration of partners within an OE from a holistic approach.

The conceptual interaction of understanding strategic context, developing holistic approaches to operations focused on propensity and potential opportunities, and embracing complexity at the edge of chaos will help Army planners to innovative and develop novel operational approaches to the complexity of a future hybrid threat. A hybrid way of thinking understands and embraces the systemic nature of the OE and operations. It promotes the rearrangement of existing rules and the reconfiguration of time and space through innovation in order to exploit the natural propensity of an OE. Instead of just recognizing the ever-present underlying asymmetry between two military forces, this conceptual tool helps to exploit it in a

¹⁸⁹Department of Defense, *Quadrennial Defense Review (QDR) 2014*, 22. Note: adjusted for syntax.

¹⁹⁰Ibid., 22.

manner that supports the user's objectives. Overall, this mindset possess the potential to help Army planners think like complex-adaptive systems and incorporate some characteristics of complex-adaptive systems into their operational approaches.

One of the most significant characteristics of a hybrid threat is its continually rearranging presentation of forces in response to changing environmental conditions. Uncertainty born from a hybrid threat's varying disposition creates conceptual complexity as a hybrid threat's adversaries struggle to understand its ambiguity. This condition represents a major source of strength for a hybrid force as its complexity increases. However, the same potential condition exists for US Army forces with a hybrid way of thinking. The development of innovative ways to arrange tactical forces/actions in time and space to achieve strategic aims will offset a hybrid threats decision-making calculus. Now, uncertainty born from variation in the actions of US Army forces will create ambiguity in the mind of a hybrid threat. Increasing ambiguity will compel a hybrid threat to pick a definable or relatively fixed operational form that Army planners can analyze, synthesize, and then counter. Through the displacement of uncertainty, Army planners can attain a cognitive position of relative advantage and source of strength for US Army forces in a fight to out-think and out-adapt a future hybrid threat.

The incorporation of hybrid way of thinking into the Army operational planner's conceptual kit bag possesses enormous potential for defeating future hybrid threats. The three cases studies of this monograph that span cultural, temporal, and spatial boundaries support the existence and implications of this mindset. However, this monograph is just an attempt to scratch the surface of a military theory of the hybrid phenomenon. There is enormous potential for further research into the concept of hybrid thinking and the possible development of a hybrid approach to war. If the idea of hybrid endures as a means for the weak to combat the strong, the more intellectual power devoted to furthering an understanding of the true essence of hybrid, the better.

BIBLIOGRAPHY

- Achcar, Gilbert, and Michel Warschawski. *The 33-Day War: Israel's War on Hezbollah in Lebanon and Its Consequences.* Boulder: Paradigm Publishers, 2007.
- Adamsky, Dima. The Culture of Military Innovation: The Impact of Cultural Factors on the Revolution in Military Affairs in Russia, the US, and Israel. Stanford: Stanford University Press, 2010.
- Arkin, William M. *Divining Victory: Airpower in the 2006 Israel-Hezbollah War*. Maxwell Air Force Base: Air University Press, 2007.
- Bar-Joseph, Uri. "The Hubris of Initial Victory: The IDF and the Second Lebanon War." In *Israel and Hizbollah: An Asymmetric Conflict in Historical and Comparative Perspective*, edited by Clive Jones and Sergio Catignani, 147-162. New York: Routledge, 2010.
- Ben-David, Alon. "Debriefing Teams Brand IDF Doctrine 'Completely Wrong'." *Jane's Defence Weekly*, 2007.
- Berger, Peter L., and Thomas Luckmann. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. New York: Anchor Books, 1967.
- Bjorge, Gary J. "Compound Warfare in the Military Thought and Practice of Mao Zedong and the Chinese People's Liberation Army's Huai Hai Campaign." In *Compound Warfare: That Fatal Knot*, edited by Thomas M. Huber, 169-220. Fort Leavenworth: US Army Command General and Staff College Press, 2002.
- ———. Moving the Enemy: Operational Art in the Chinese PLA's Huai Hai Campaign.

 Leavenworth Paper, Fort Leavenworth: US Army Combined Arms Center Combat Studies Institute Press, 2003.
- Boot, Max. *Invisible Armies: An Epic History of Guerilla Warfare From Ancient Times to the Present.* New York: Liveright Publishing, 2013.
- Bousquet, Antoine. *The Scientific Way of Warfare: Order and Chaos on the Battlefields of Modernity*. New York: Columbia University Press, 2009.
- Brun, Itai. "The Second Lebanon War, 2006." In *A History of Air Warfare*, edited by John Andreas Olsen, 297-324. Washington, DC: Potomac Books, 2010.
- Chandler, David G. The Campaigns of Napoleon. Vol. 1. New York: Scribner, 1996.
- Chartrand, Rene. Spanish Guerrillas in the Peninsular War. Oxford: Osprey Publishing, 2004.
- Clausewitz, Carl von. *On War*. Translated and edited by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1989.
- Cordesman, Anthony H., George Sullivan, and William D. Sullivan. "Lessons of the 2006 Israeli-Hezbollah War." Monograph, Center for Strategic and International Studies, 2007.

- D'Agostino, Davi M. GAO-10-1036R: *Hybrid Warfare*. Performance Audit/Briefing, Washington, DC: US Government Accountability Office, 2010.
- Davies, Huw J. Wellington's Wars: The Making of a Military Genius. New Haven: Yale University Press, 2012.
- Davis, Jr., John R. "Defeating Future Hybrid Threats: The Greatest Challenge to the Army Profession of 2020 and Beyond." *Military Review*. Vol. 93, no. 5 (September-October 2013): 21-29.
- Department of Defense. *Quadrennial Defense Review (QDR) 2014*. Washington, DC: Government Printing Office, 2014.
- Erlich, Reuven. *The Road to the Second Lebanon War: The Lebanese Scene in the Years 2000-2006*. Summary Report, Tel Aviv: Israeli Intelligence Heritage and Commemoration Center, 2007.
- Fletcher, Ian. The Lines of Torres Vedras 1809-11. Oxford: Osprey Publishing, 2003.
- Freier, Nathan. "Strategic Competition and Resistance in the 21st Century: Irregular, Catastrophic, Traditional, and Hybrid Challenges in Context." Monograph, US Army War College Strategic Studies Institute, 2007.
- Gates, David. *The Spanish Ulcer: A History of the Peninsular War*. Cambridge: Da Capo Press, 2001.
- Glenn, Russell W. "All Glory is Fleeting: Insights from the Second Lebanon War." Monograph, RAND, 2012.
- Grehan, John. *The Lines of Torres Vedras: The Cornerstone of Wellington's Strategy in the Peninsular War 1809-1812*. Staplehurst: Spellmount Limited, 2004.
- Hammes, Thomas X. *The Sling and the Stone: On War in the 21st Century.* Minneapolis: Zenith Press, 2006.
- Harel, Amos, and Avi Issacharoff. *34 Days: Israel, Hezbollah, and the War in Lebanon*. New York: Palgrave MacMillan, 2008.
- Haythornthwaite, Philip. Wellington: The Iron Duke. Washington, DC: Potomac Books, 2007.
- Headquarters, Department of the Army. Army Doctrine Publication (ADP) 3-0, *Unified Land Operations*. Washington, DC: Government Printing Office, 2011.
- ———. Army Doctrine Reference Publication (ADRP) 3-0, *Unified Land Operations*. Washington, DC: Government Printing Office, 2012.
- ———. Training and Doctrine Command (TRADOC) Pamphlet 525-5-500, *Commander's Appreciation and Campaign Design*. Washington, DC: Government Printing Office, 2008.

- ———. Training Circular (TC) 7-100, *Hybrid Threat*. Washington, DC: Government Printing Office, 2010.
- Hoffman, Frank G. "Conflict in the 21st Century: The Rise of Hybrid Wars." Monograph, Potomac Institute for Policy Students, 2007.
- Huber, Thomas M. "Compound Warfare: A Conceptual Framework." In *Compound Warfare: That Fatal Knot*, edited by Thomas M. Huber, 1-10. Fort Leavenworth: US Army Command and General Staff College Press, 2002.
- ——. "Napoleon in Spain and Naples: Fortified Compound Warfare." In *Compound Warfare: That Fatal Knot*, edited by Thomas M. Huber, 91-112. Fort Leavenworth: US Army Command and General Staff College Press, 2002.
- Israeli Intelligence and Terrorism Information Center at the Center for Special Studies. *Hezbollah* (Part 1): Profile of the Lebanese Shiite Terrorist Organization of Global Reach Sponsored by Iran and Supported by Syria. Special Information Bulletin, Tel Aviv: Israeli Center for Special Studies, 2003.
- Johnson, David E. "Hard Fighting: Israel in Lebanon and Gaza." Monograph, RAND, 2011.
- ——. "Military Capabilities for Hybrid War: Insights from the Israeli Defense Forces in Lebanon and Gaza." Occasional Paper, RAND, 2010.
- Jomini, Antoine-Henri. "The Art of War." In *Roots of Strategy Book 2*, edited by Thomas R. Philips, 389-557. Harrisburg: Stackpole Books, 1987.
- Jullien, François. *The Propensity of Things*. New York: Zone Books, 1995.
- Kissinger, Henry. On China. New York: Penguin Books, 2012.
- Knox, MacGregor, and Williamson Murray. "Conclusion: The Future Behind Us." In *The Dynamics of Military Revolution*, *1300-2050*, edited by MacGregor Knox and Williamson Murray, 175-194. Cambridge: Cambridge University Press, 2009.
- Lai, David. "Learning from the Stones: A Go Approach to Mastering China's Strategic Concept, Shi." Monograph, US Army War College Strategic Studies Institute, 2004.
- Liang, Qiao, and Wang Xiangsui. *Unrestricted Warfare*. Bejing: PLA Literature and Arts Publishing, 1999.
- Lind, William S., Keith Nightengale, John F Schmitt, Joseph W. Sutton, and Gary I. Wilson. "The Changing Face of War: Into the Fourth Generation." *Marine Corps Gazette* 73, no. 10 (1989): 22-26.
- Lynn, John A. Battle: A History of Combat and Culture. Boulder: Westview Press, 2003.
- Makovsky, David, and Jeffrey White. "Lessons and Implications of the Israel-Hezbollah War: A Preliminary Assessment." Policy Focus, The Washington Institute for Near East Policy, 2006.

- Mansoor, Peter R. "Introduction: Hybrid Warfare in History." In *Hybrid Warfare: Fighting Complex Opponents from the Ancient World to the Present*, edited by Williamson Murray and Peter R. Mansoor, 1-17. Cambridge: Cambridge University Press, 2012.
- Matthews, Matt M. We Were Caught Unprepared: The 2006 Hezbollah-Israeli War. The Long War Series Occasional Paper 26, US Army Combined Arms Center, Fort Leavenworth: Combat Studies Institute Press, 2008.
- Murray, Williamson. "Conclusion: What the Past Suggests." In *Hybrid Warfare: Fighting Complex Opponents from the Ancient World to the Present*, edited by Williamson Murray and Peter R. Mansoor, 289-307. Cambridge: Cambridge University Press, 2012.
- Napier, W.F.P. History of the War in the Peninsula and in the South of France from A.D. 1807 to A.D. 1814. Vol. 2. New York: AMS Press, 1862.
- Paget, Julian. Wellington's Peninsular War: Battles and Battlefields. London: Leo Cooper, 1990.
- Pape, Robert A. *Bombing to Win: Air Power and Coercion in War*. Ithaca: Cornell University Press, 1996.
- Scales, Jr., Robert H., and Paul K. Van Riper. "Preparing for War in the 21st Century." In *Future Warfare Anthology: Revised Edition*, edited by Robert H. Scales, Jr., 23-40. Carlisle: US Army War College Strategic Studies Institute, 2001.
- Sinnreich, Richard H. "That Accursed Spanish War: The Peninsular War, 1807-1814." In *Hybrid Warfare: Fighting Complex Opponents from the Ancient World to the Present*, edited by Williamson Murray and Peter R. Mansoor, 104-150. Cambridge: Cambridge University Press, 2012.
- Sirriyeh, Hussain. "The Emergence of Hizbollah and the Beginnings of Resistance, 1982-85." In *Israel and Hizbollah: An Asymmetric Conflict in Historical and Comparative Perspective*, edited by Clive Jones and Sergio Catignani, 39-48. New York: Routledge, 2010.
- Sobelman, Daniel. "Hizbollah From Terror to Resistance: Towards a National Defence Strategy." In *Israel and Hizbollah: An Asymmetric Conflict in Historical and Comparative Perspective*, edited by Clive Jones and Sergio Catignani, 49-66. New York: Routledge, 2010.
- The Commission for the Examination of the Events of the 2006 Campaign in Lebanon (The Winograd Commission). *The Second Lebanon War: Final Report*. Vol. 1. Tel Aviv: Israeli Government, 2008.
- Toffler, Alvin, and Heidi Toffler. War and Anti-War. New York: Warner Books, 1993.
- Tone, John L. The Fatal Knot. Chapel Hill: The University of North Carolina Press, 2005.
- Tzu, Sun. *The Art of War*. Translated by Samuel B. Griffith. New York: Oxford University Press, 1971.

Wellington, Arthur Wellesley Duke of 1769-1852. The Dispatches of Field Marshall the Duke of Wellington: K. G. during his Various Campaigns in India, Denmark, Portugal, Spain, the Low Countries, and France. From 1799 to 1818. New Edition. 2 vols. London: J. Murray, 1836-1839.

Zedong, Mao. Selected Works of Mao Tse-Tung. 2 vols. Peking: Foreign Language Press, 1965.