# HYBRID WARFARE: A MILITARY REVOLUTION OR REVOLUTION IN MILITARY AFFAIRS?

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In the last decade, a new term, hybrid war, has been surfacing amongst scholars of warfare. The latest Swedish Military Strategic Doctrine also uses the term. Proponents of hybrid warfare use the term to describe the area where regular warfare and irregular warfare intersect and blend to create a new form of warfare. This thesis uses the Williamson Murray and McGregor Knox definitions of Military Revolution (MR) and Revolution in Military Affairs (RMA) in order to determine if hybrid warfare falls under MR or RMA. As necessary, insights from other sources have further helped define Murray and Knox's concept of MR and RMA.

The purpose of this thesis is not to settle an argument about the validity of the concept off hybrid warfare. Neither does it propose to verify whether there are grounds for using the term hybrid warfare or not in the Swedish Military Strategic Doctrine. The thesis simply tries to analyze a concept brought forward in recent theoretical military discourse. Based on the above, this thesis will not suggest any doctrinal changes or concepts of training for hybrid warfare. It will not suggest any changes to the current force structure within the Swedish Armed Forces. Only the term hybrid warfare will be examined, not the term hybrid threats.

Due to the limited scope and depth of this study, it is unfeasible to determine degrees of correlation of MR and RMA; furthermore, all conclusions are tentative without validation by more extensive studies.

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The opinions and conclusions expressed herein are those of the student author alone and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other U.S. or Swedish governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

HYBRID WARFARE: A MILITARY REVOLUTION OR REVOLUTION IN MILITARY AFFAIRS?, by Thomas Bjerregaard, 86 pages.

In the last decade, a new term, hybrid war, has been surfacing amongst scholars of warfare. The latest Swedish Military Strategic Doctrine also uses the term. Proponents of hybrid warfare use the term to describe the area where regular warfare and irregular warfare intersect and blend to create a new form of warfare. This thesis uses the Williamson Murray and McGregor Knox definitions of Military Revolution (MR) and Revolution in Military Affairs (RMA) in order to determine if hybrid warfare falls under MR or RMA. As necessary, insights from other sources have further helped define Murray and Knox's concept of MR and RMA.

The purpose of this thesis is not to settle an argument about the validity of the concept off hybrid warfare. Neither does it propose to verify whether there are grounds for using the term hybrid warfare or not in the Swedish Military Strategic Doctrine. The thesis simply tries to analyze a concept brought forward in recent theoretical military discourse. Based on the above, this thesis will not suggest any doctrinal changes or concepts of training for hybrid warfare. It will not suggest any changes to the current force structure within the Swedish Armed Forces. Only the term hybrid warfare will be examined, not the term hybrid threats.

Due to the limited scope and depth of this study, it is unfeasible to determine degrees of correlation of MR and RMA; furthermore, all conclusions are tentative without validation by more extensive studies.

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ACRONYMS

| | |
|---|---|
| C2 | Command and Control |
| EBO | Effect Based Operations |
| IDF | Israeli Defense Forces |
| MBT | Main Battle Tank |
| MR | Military Revolution |
| MSD | Military Strategic Doctrine (*Militärstrategisk Doktrin)* |
| RMA | Revolution in Military Affairs |
| RPG | Rocket Propelled Grenade |
| U.S. | United States |

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# CHAPTER 1

# INTRODUCTION

> In each succeeding war there is a tendency to proclaim as something new the principles under which it is conducted. Not only those who have never studied or experienced the realities of war, but also professional soldiers frequently fall into the error. But the principles of warfare as I learned them at West Point remain unchanged.
>
> — John J. Pershing, *My Experiences in the World War*

## The Relevance of Understanding Hybrid Warfare

Since the dawn of recorded history, man's understanding of war has been subject to intellectual strife. Records of efforts in this field date back thousands of years. Evidence of this is in the writing of the Chinese General Sun-Tzu: dating ca. 500 B.C., or Niccolo Machiavelli's books on war and politics. Granted some of history's earlier teaching arguably lacks current applications. As an example, the phalanx of the Greek era or the lines and columns of the Napoleonic wars no longer apply to the modern battlefield. Then again some of the earlier writers tried to comprehend war's very nature, and not so much how it should be fought, using the means and weapons of a specific time.

A representative of the latter approach to the study of war is the Prussian writer and General Carl von Clausewitz. In his masterpiece *On War*, Clausewitz tried to understand and describe the very nature of war using a philosophical approach. Clausewitz addresses moral factors and elements, and concludes that they "are among the

most important in war."[1] Clausewitz also deals with elements of the physical domain including forces, logistics, and firepower.[2] However, Clausewitz addressed the cognitive domain in many parts of his book.[3] His studies of war led him to conclude that there are three elements always present in war. He named this the "remarkable trinity."

Although wars always adapt to the circumstances at hand, the fundamentals are always the same according to Clausewitz. The remarkable trinity, composed of violence and hatred, chance and probability, and political considerations is in turn reflected by the people, military forces, and governing bodies. Clausewitz's greatest finding and contribution to understanding war, contemporary or historically, is this insight of a trinity that has always been present in wars. Clausewitz concluded that no matter the superficial appearances of war, the same factors are always at play underneath. As societies evolved, they produced new means of dominating its less fortunate neighbors and enemies, but the underlying elements of wars remained the same. To some readers Clausewitz seems to have unlocked the secrets to understanding warfare.

However, even though the same forces or elements might be at play in all wars there is still a need to continue the study of war. New weapons and increased lethality on the battlefield changes our concepts of war fighting. As mentioned earlier, today's modern battlefields have little room for yesterday's phalanxes, and lines, and columns.

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[1]Carl von Clausewitz, *On War*, ed. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976), 184.

[2]Ibid., 204-209.

[3]Ibid., 100.

Continued development and change challenges armed forces to continuously reexamine how to fight wars.[4]

How to prepare for future wars has always been a challenge for armies. Should history dictate what choices to make? Should contemporary trends be the guiding principle, or perhaps a combination? In the twenty first century, armies face these challenges in the same way that armies have always faced them. By studying potential opponents and adapting or even developing completely new skill sets.

In making choices that will have a long-term impact it is important to understand what new theories and concepts have to offer, and what they have not. This is why it is important to fully understand new concepts. Douglas C Lovelace. Director Strategic Studies Institute has this insight to offer regarding the importance of understanding new theories:

> In an era of broad and perhaps profound change, new theories and concepts are to be welcomed rather than shunned. However, before they are fully embraced, they need to be tested rigorously, for the cost of implementing a false theory and developing operational and strategic concepts around it can be greater than remaining wedded to an older, but sounder one.[5]

## Doctrine

An important way of providing guidance on war fighting has been doctrine. By establishing doctrine, nations and armed forces around the world have provided guidelines on how and when to use military force, and to what purpose. Doctrine thus provides an essential element to the war fighting capability by directing and guiding both

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[4]MacGregor Knox and Williamson Murray, eds., *The Dynamics of Military Revolution 1300-2050* (Cambridge: Cambridge University Press, 2001), 175.

[5]Antullio J. Echevarria, "Fourth-Generation War and Other Myths" (Monograph, Strategic Studies Institute, Carlisle, PA, 2005).

the planning and execution of military operations. As expressed in the North Atlantic Treaty Organization Glossary of Terms and Definitions, doctrine is "fundamental principles by which military forces guide their actions in support of objectives. It is authoritative, but requires judgment in application."[6] Doctrine is a vital and indispensable tool for any serious efforts to excel in war.

In 2011, the Swedish Armed Forces published a new Military Strategic Doctrine (MSD) 12, 10 years after its predecessor MSD 02.[7] The need for a revision of the Military Strategic Doctrine became evident when the government in 2009 submitted a bill labeled "A functional defense" [*Ett användbart försvar*].[8] The bill called for major changes in how the Swedish Armed Forces were to operate and to what purpose. It meant that the Swedish Armed Forces took the final step away from a defense posture focused on defending the homeland against a conventional attack. Instead, the focus has now shifted to include defending Swedish values not only at home, but also in parts of the world that the Army previously did not plan to fight. The reasoning behind this is that by helping others we (as in the developed world) help create a safer and more stable environment globally, which in turn will have a positive impact in our own region.

MSD 12 describes a new defense posture with changing tasks. It also describes how the armed forces should prepare solving those tasks, by setting the doctrinal basis for

[6]North Atlantic Treaty Organization, AAP-6, NATO Glossary of Terms and Definitions, www.fas.org/irp/doddir/other/nato2008.pdf (accessed 29 November 2012).

[7]Militärstrategisk doktrin [military-strategic doctrine], MSD 12, Försvarsmakten, FMLOG APSA: Grafisk produktion, Stockholm, 2011.

[8]Ett användbart försvar [a functional defense]-försvarspolitisk proposition 2008/09:140, Proposition 19 mars 2009, Försvarsdepartementet, http://www.regeringen.se/sb/d/108/a/122957 (accessed 29 November 2012).

operations in the future. The doctrine deals with both new and old concepts, such as irregular warfare, comprehensive approach, effect-based approach, and expeditionary capability in relation to the military strategic level. For the first time in Swedish official doctrine the terms hybrid warfare and hybrid threats are also used. The terms hybrid warfare and hybrid threats illustrate the character of future threats and challenges.

## Hybrid Warfare

Arguments to the effect that we are facing a new type of warfare, hybrid warfare, are not uncommon today. Proponents of hybrid warfare use the term to describe the area where regular warfare and irregular warfare intersect and blend to create a new form of warfare. Adversaries that are hybrid in nature use components and techniques from both the regular and irregular sides of warfare, and blend them into a threat that seems new.[9] In current Swedish doctrine (*Militärstrategisk doktrin*), MSD 12 the terms hybrid warfare and hybrid threats are used to this effect.

However, within Swedish Military Doctrine no suggestions exist on how to counter hybrid adversaries. If the Swedish Army is to prepare for hybrid threats and hybrid warfare, it is prudent to define and describe hybrid warfare. As these concepts are new to the Swedish defense discourse, it is fitting to try to define them. Only by understanding a threat, is it possible to prepare a suitable response.

This thesis will use the Williamson Murray and McGregor Knox definitions of Military Revolution (MR) and Revolution in Military Affairs (RMA) to determine if

[9]Frank G. Hoffman, *Conflict in the 21st Century: The Rise of Hybrid Wars* (Arlington, VA: Potomac Institute for Policy Studies, December 2007), http://www.potomacinstitute.org/images/stories/publications/potomac_hybridwar_0108.pdf (accessed 12 June 2012).

hybrid warfare falls under MR or RMA.[10] As necessary, insights from other sources will further help define Murray and Knox's concept of MR and RMA. Doing this will provide a starting point from which to continue the analysis of hybrid warfare.

## The Thesis and the Questions

This study compares hybrid warfare with MR and RMA in order to define hybrid warfare. The thesis will focus on the characteristics of hybrid warfare, to determine what best describes them, MR, RMA, or something else. The intent is to provide foundation for further studies into hybrid warfare. According to Professors Knox and Murray, two different phenomena have been at work to drive changes in warfare throughout history, MR, and RMA.[11] The aim of the thesis is to analyze hybrid warfare to determine whether it qualifies as one of the two, by using criteria from Murray and Knox.

In order to clarify what hybrid warfare is and what it is not, this thesis sets out to answer the question; what is hybrid warfare: a revolution in military affairs, a military revolution, or something else? Posing three secondary questions will facilitate answering the main questions. What is the definition of hybrid warfare? This question is necessary in order to be able to apply different criteria in the analysis to the concept of hybrid warfare. By fusing different views on hybrid warfare, the lowest common denominator will be determined and examined using Murray and Knox's theories. The theory of MR and RMA by Murray and Knox will be the criteria to analyze hybrid warfare. The second

[10]Knox and Murray.

[11]Ibid.

question will therefore be; what is Military Revolution, and question three will be; what is Revolution in Military Affairs?

## Methodology

The vast number of authors and writers on the subject of hybrid warfare necessitates some form of selection. The impact different writers have had on contemporary discourse determines the selection of sources. This means the number of published papers or monographs and in turn, the frequency of comments on them. That also means basing the theoretical background for MR and RMA predominantly on Murray and Knox. These two authors have been at the center of the discussion since the publication of their *The Dynamics of Military Revolution 1300-2050.*[12] A case study helps compare the extrapolation of the analysis and synthesis of their writings on MR to the result of the qualitative analysis of hybrid warfare. A case study is a useful tool for an empirical inquiry that investigates a contemporary phenomenon, especially when the boundaries between phenomenon and context are not clearly evident.[13]

The first area of research answers the first, of the secondary questions. It helps in answering what hybrid warfare is in terms of defined phenomena associated with the subject. In order to enable the analysis hybrid warfare have been broken up in terms of technology, social impact, and Command and Control (C2).

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[12]Ibid.

[13]Jessica C, Iacono, Ann Brown, and Clive Holtham, "The Use of the Case Study Method in Theory Testing: The Example of Steel eMarketplaces," *The Electronic Journal of Business Research Methods* 9, no. 1 (2011): 57-65.

The second area of research answers the second, of the secondary questions. The definition of MR as explained by MacGregor and Knox helps construct a framework to analyze hybrid warfare.

The third area of research answers the third, of the secondary questions. The definition of RMA as explained by MacGregor and Knox helps construct a framework to analyze hybrid warfare.

## Limitations and Delimitations

The purpose of this thesis is not to settle an argument about the existence of hybrid warfare. Neither does it propose to verify whether there are grounds for using the term hybrid warfare or not in the Swedish MSD. The thesis simply tries to analyze a concept brought forward in recent theoretical military discourse.

Based on the above, this thesis will not suggest any doctrinal changes or concepts of training for hybrid warfare. It will not suggest any changes to the current force structure within the Swedish Armed Forces. Only the term hybrid warfare will be examined, not the term hybrid threats.

## Assumptions

There is a phenomenon present today, that fits the description of hybrid warfare.

The Swedish Armed Forces will develop methods of waging war against a hybrid enemy based on current doctrine.

In order to develop methods of countering hybrid threats the Swedish Armed Forces will need a comprehensive understanding of hybrid warfare to include definition of hybrid warfare.

# CHAPTER 2

# LITERATURE REVIEW

> I suggest that the only books that influence us are those for which we are ready, and which have gone a little further down our particular path than we have yet gone ourselves.
>
> — E.M. Forster, *Room with a View*

## Hybrid War, Revolution in Military Affairs, and Military Revolution in the Literature

In order to determine what constitutes hybrid warfare the first section of this chapter will be a review of some of the more prominent writers on hybrid warfare. The choice of writers included in the thesis research depends on their contributions in defining hybrid warfare. The writings of Frank Hoffman will serve as the basis for studying hybrid warfare. Hoffman has been one of the most ardent proponents for the concept of hybrid warfare. The number of articles and papers produced on the topic determines the choice of authors. This is in itself no guarantee for quality, so a quick cross reference on how often other writers refer to or mention the specific authors chosen, is used to determine their relevance.

The second section of this chapter will address Murray and Knox's concepts of Military Revolution and Revolution in Military Affairs.[14] Since the concepts of MR and RMA are the examining tool for this thesis, only Murray and Knox's book helps determine what criteria constitute the two phenomena.

[14]Knox and Murray.

## Hybrid Warfare

What makes the literature on hybrid warfare intriguing is that the United States (U.S.) Department of Defense does not recognize hybrid warfare in its own right.[15] The Department of Defense has not officially defined hybrid warfare at this time and has no plans to do so because the Department of Defense does not consider it a new form of warfare. Nevertheless, the debate on future adversaries and their enhanced lethality derived from blending different forms of capabilities continues. For example, according to Air Force officials, hybrid warfare is a potent, complex variation of irregular warfare. U.S. Special Operations Command officials on the other hand do not use the term hybrid warfare, stating that current doctrine on traditional and irregular warfare is sufficient to describe the current and future operational environment.[16]

Thus, hybrid warfare causes some debate among contemporary scholars. Two standpoints are present in the ongoing debate on hybrid warfare. On one hand, there are proponents that believe hybrid warfare is a reality needing consideration in its own right. They believe it to be apart from regular and irregular warfare, although it contains parts of the two. The other side argues that hybrid warfare only labels something that has existed throughout the history of warfare, and thus does not need a new label, or at least can be understood in its historical context.

For the purpose of this thesis, the assumption is that there is a new form of warfare in today's world and it can be labeled hybrid warfare. This means that the thesis

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[15]Government Accountability Office, GAO-10-1036R, *Hybrid Warfare* (Washington, DC: Government Printing Office, 2010).

[16]This paragraph is an excerpt from, Government Accountability Office, GAO-10-1036R, *Hybrid Warfare.*

will not concern itself with answering the question whether there is any validity to the term hybrid warfare itself. This also leads to the fact, that in order to determine the characteristics of hybrid warfare only proponents of this concept have been included in the literature review in order to answer.

Whatever position is right or wrong or has the most to contribute to the understanding of modern warfare, hybrid warfare is perhaps the latest conceptual theory of modern warfare and recognized by military practitioners. Swedish military doctrine recognizes the concept of hybrid warfare and hybrid threats and for this thesis, the focus on the literature review and the ensuing analysis will come from proponents of hybrid warfare. The goal is to define hybrid warfare to a point that hopefully is more than just the conclusion, that there is no such thing as hybrid warfare.

## Frank G. Hoffman

Numerous articles and papers support the idea that hybrid wars are a new phenomenon. One proponent for the idea that there is a new type of warfare present today is Frank G. Hoffman. Hoffman, a retired U.S. Marine Lieutenant Colonel, is currently working at the National Defense University as a Senior Research Fellow and senior editor for National Defense University Press. Hoffman first presented the theory in 2007, and he is widely published as an active participant in ongoing defense debates.

In 2007 he published an article titled “Conflict in the 21st century: The rise of Hybrid Wars.”[17] In this article, he argues that in the future we will face opponents that are not only regular, or irregular, or terrorists. Instead, our future opponents are capable

[17]Hoffman, *Conflict in the 21st Century*.

of simultaneously using a combination of these capabilities. Hoffman admits that there have been examples of wars in history where regular and irregular tactics have blended, but he also believes that today's technology has changed warfare in a way that is so new, that it constitutes a hybrid threat.

The challenge, as far as this thesis is concerned, is that Hoffman does not offer a distinctive definition of hybrid warfare in this monograph, but only describes its nature.

In an article labeled "Hybrid Warfare and Challenges" published in *Joint Force Quarterly* (2009), Hoffman argues that hybrid warfare creates a new operational environment that the U.S. is currently unprepared to fight in.[18] Warfare, according to Hoffman, is converging and blending into a hybrid form, wherein adversaries will use all capabilities at their disposal. Hoffman's main argument is that "hybrid wars blend the lethality of state conflict with the fanatical and protracted fervor of irregular warfare."[19] This is really the essence of Hoffman's argument, that although not unfamiliar, this new phenomenon has aspects to it that sets it apart from previous experiences, such as compound warfare.

According to Hoffman, both states and non-state actors can conduct hybrid warfare.[20] Arguably, Hoffman agrees that non-state actors have fought wars in the past, but not with the lethality of a state-actor. This new lethality, made possible by accessibility to modern weapons even to non-state actors, in combination with increased

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[18]Frank G. Hoffman, "Hybrid Warfare and Challenges," *Joint Force Quarterly* no. 52 (1st Quarter 2009): 34-39.

[19]Ibid., 37.

[20]Ibid., 36.

reliance on modern forms of communication and networking, makes today's states easier to target than before.

To sum up Hoffman's views on hybrid warfare he defines hybrid warfare as "any adversary that simultaneously and adaptively employs a fused mix of conventional weapons, irregular tactics, terrorism, and criminal behavior in the battle space to obtain their political objectives."[21] Hoffman sees the future of warfare as more than just counterinsurgency operations versus traditional war.[22]

Some of the critique directed at Hoffman's thesis, is that to understand hybrid warfare it is not enough to address the tactical level of warfare. It is important to understand that hybrid warfare stems from and affects the operational and strategic levels of war fighting.

In the book *Hybrid Warfare: Fighting Complex Opponents from the Ancient World to the Present*, edited by Williamson Murray and Peter R. Mansoor, the authors use nine historical examples to show that hybrid warfare is not a new phenomenon, but can be traced throughout history. They still use the term hybrid, though, to emphasize that they agree on the basic assumptions on what hybrid warfare is.

An initial conclusion finds that many scholars agree that there is a phenomenon in contemporary warfare in need of addressing. The issue seems to be whether this is an old

[21]Frank G. Hoffman, "Hybrid vs. Compound War: The Janus choice; Defining Today's Multifaceted Conflict," *Armed Forces Journal* (October 2009), http://www.armedforcesjournal.com/2009/10/4198658/ (accessed 29 November 2012).

[22]Frank G. Hoffman, "The Reemergence of Hybrid Conflicts" (Brief, Marine Corps Warfigthing Laboratory, 8 December 2008).

or new phenomenon, and this in turn led to an argument whether it should have its own label, i.e. hybrid warfare, or whether agreed upon terminology already covers it.

Thomas M. Huber

Hybrid threats are not something novel according to some historians, who have long recognized that wars throughout history on a regular basis, display a blending of regular and irregular tactics. Compound warfare is created by the simultaneous use of; regular or main forces, and irregular, or guerilla forces.[23] Thomas M Huber's book *Compound Warfare: That fatal knot*, published in 2002, looks into the history of blending regular and irregular tactics to create advantage against an opponent.[24] In the book a number of campaigns such as the American Revolution, Napoleon's Spanish War, and Mao Zedong's Chinese Revolutionary War among others, makes the case for compound warfare. Compound warfare occurs when all or most of a weaker power's territory is occupied by a stronger force and the weaker part resorts to a combination of forces, regular and irregular.

This blending into compound warfare has, according to Huber, often frustrated great leaders and their militaries in the past. The deliberate simultaneous use of regular and irregular forces in compound warfare forces the enemy to deal with a dilemma. He has to mass his forces to deal with the threat of the regular forces, but at the same time,

[23]Thomas M. Huber, Michael D. Pearlman, Jerry D. Morelock, Jerold E. Brown, John T. Broom, Gary J. Bjorge, Randall N. Briggs, and Robert F. Baumann, *Compound Warfare–That Fatal Knot* (Ft. Leavenworth, KS: U.S. Army Command and General Staff College Press, 2002), 1.

[24]Ibid.

he needs to disperse over a wide area to deal with the irregular threat.[25] Of course, this leads to a number of different challenges along logistical and security lines of operations. The choice, whether to fight the insurgency or the main force becomes a very difficult one. At the same time, Huber's definition of compound warfare also assumes that the regular and irregular forces are coordinated.[26] He notes however, that there are varying degrees of coordination and that it can go from very little coordination, to a complete command authority. Mao Zedong's campaigns are an example of the latter.

## David Kilcullen

In 2009, the Australian author and former advisor to General David Petreaus on counterinsurgency, David Kilcullen published a book that was well received by critics entitled *The Accidental Guerilla*.[27] A small portion of the book is dedicated to hybrid warfare and is where Kilcullen presents a model for understanding hybrid warfare in Iraq.[28] According to Kilcullen, hybrid warfare in Iraq consisted of four "strategic" problems. They are, the underlying capacity-building problem, coupled with terrorism, insurgency, and communal conflict that all overlap. Capacity building refers to the capability of the coalition forces to provide the necessary resources to build an indigenous capacity to provide security. This means supplying not only materiel like

[25]Ibid., 2.

[26]Ibid., 6.

[27]David Kilcullen, *The Accidental Guerilla* (Oxford: Oxford University Press, 2009).

[28]Ibid., 149.

weapons and transportation assets, but also training capacity, and the necessary conditions of security and logistical support to aid this.

Coupled with tensions of religious and ethnic origin, the confluence of these factors causes a situation that makes it almost impossible to address the underlying problems.[29] Kilcullen's conclusion is that hybrid warfare is the best explanation for modern conflicts. He also believes that hybrid warfare includes a combination of irregular warfare, civil war, insurgency, and terrorism that coupled with local conditions blends into a hybrid threat.

## Bill Nemeth

Marine Lieutenant Colonel Bill Nemeth's graduate work from the Naval Postgraduate School in 2002 also helps define hybrid warfare. Nemeth uses the Chechnya wars as a case study and defines hybrid warfare as "the contemporary form of guerrilla warfare."[30] He goes on to conclude that hybrid warfare "is a continuation of pre-state warfare that has become more effective because it employs both modern technology and modern mobilization methods."[31] The prerequisite for the Chechnyan's ability to easily transition from conventional to guerrilla tactics lies in the culture and society of Chechnya. This, coupled with a deep knowledge about the capabilities of Russian units,

[29]Ibid., 149-150.

[30]Bill Nemeth, "Future War and Chechnya: A Case for Hybrid Warfare" (Thesis, Naval Postgraduate School, Monterey, CA, 2002), http://edocs.nps.edu/npspubs/scholarly/theses/2002/Jun/02Jun_Nemeth.pdf (accessed 29 November 2012), 29.

[31]Ibid.

made the situation very advantageous for the Chechens. In many ways, their tactics would often straddle the boundary between guerrilla warfare and terrorism.

### John J. McCuen

In the *Military Review* issue of March-April 2008, retired Colonel John J. McCuen wrote an article called "Hybrid Wars."[32] He described how the U.S. Army must prepare to fight hybrid enemies in the future. The conclusions all focuses on this topic. Even so, he also presents some ideas to where to fight, future hybrid wars. According to McCuen, future hybrid wars mean that the conflict zone (or battlefield) exists not only in the Area of Operations. Certainly, there will still be a need to conduct operations on the battlefield, but they are won or lost amongst the population of the the conflict zone.[33] Even more importantly is the notion of the importance of winning over the home front and the international community. Since hybrid wars in the future will be protracted affairs, the support of politicians and general public will be crucial. According to McCuen this means that not only how a war is fought determines if it is hybrid or not, but also where it is fought.

### Nathan Freier

Nathan Freier is a Lieutenant Colonel who, when working in the Office of the Secretary of Defense on the national defense strategy, helped devise the "quad-chart" as part of the 2006 *Quadrennial Defense Review Report*. The chart details taxonomy threats,

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[32]John J. McCuen, "Hybrid Wars," *Military Review* (March-April 2008), http://www.au.af.mil/au/awc/awcgate/milreview/mccuen08marapr.pdf (accessed 29 November 2012): 107-113.

[33]Ibid., 107.

which the U.S. will likely face in the near future. They consist of traditional, irregular, catastrophic terrorism, and disruptive threats that make use of novel technology to negate U.S. military superiority.[34]

In 2007 Freier, then working with the Strategic Studies Institute, redefined some aspects of the quad-chart. According to Freier the four threats, traditional, irregular, catastrophic terrorism, and disruptive, are archetypes and will never be seen in their pure form.[35] Instead, he argues that the blend of threats that will occur in the future will cause a hybrid threat to emerge. This threat is the sum of irregular, catastrophic, traditional, and hybrid threats. By hybrid threats, Freier includes non-military and non-violent means, such as political and economic.[36]

## Military Revolution

As the theoretical approach to analyzing hybrid warfare, this thesis will use the concept of Military Revolutions and Revolutions in military affairs as defined by Knox and Murray in their book *The Dynamics of Military Revolution, 1300-2050*. [37]

Professors Knox and Murray, provide a conceptual framework and historical context for understanding the patterns of change, innovation, and adaptation that have

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[34]Department of Defense, *Quadrennial Defense Review Report* (Washington, DC: Government Printing Office, 2006).

[35]Nathan Freier, *Strategic Competition and Resistance in the 21st Century-Irregular, Catastrophic, Traditional, and Hybrid threats in Context* (Carlisle, PA: Strategic Studies Institute, 2007), http://www.strategicstudiesinstitute.army.mil/pdffiles/pub782.pdf (accessed 29 November 2012), 46.

[36]Ibid., 36-38.

[37]Knox and Murray.

marked war since the fourteenth century. They do so by introducing two concepts, Revolution in Military Affairs and Military Revolution. When major changes affect a society, it is only natural that the military institution of that state also feels the effect of those changes. This makes MR the natural result of political and social changes that have restructured societies and states.[38] Based on historical studies MRs are the most powerful of the forces that change war fighting or our understanding of war fighting. They are unpredictable and uncontrollable, and they unleash fundamental changes to the framework of war. An obvious example would be the French Revolution that in a few short years transformed France from an absolute monarchy to a Democratic Republic. This transformation released new forces that eventually made the new type of war fought by Napoleon possible.

Military Revolutions are a result of changes that affect all of human activity and not only warfare. They are therefore difficult to control in the sense that they will happen whether we want it or not, we ride the Military Revolution.[39] MR's have an inertial drive, and they tend to change the concept of war fighting in such radical ways that there is little chance of reversing back to previous stages. A good example of the uncontrollable nature of MR is the enthusiasms and hatred that were unleashed on both sides in the beginning of World War I.[40] This passion and the initial losses on the battlefields meant that there was little chance of going back.

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[38]Ibid., 176,

[39]Scott Stephenson, "The Revolution in Military Affairs: 12 Observations on an Out-of-Fashion Idea," *Military Review* (May-June 2010): 38-46.

[40]Knox and Murray, 176.

## Revolutions in Military Affairs

Alongside and within MRs there is a cluster of less embracing changes to warfare.[41] Murray and Knox describe these changes as Revolutions in Military Affairs. RMA are not fundamental and unpredictable changes in the same way as MR's. Instead, they are often associated with a conscious effort by a military institution to gain an advantage in war fighting.[42] Table 1 on page 24, shows an outline of the linkage between MR's and RMA.

However it is not simply a new piece of equipment or a new weapon that make up an RMA. RMA, although not as fundamentally transforming as MRs, are still major shifts in tactics and doctrine as they are the result of a complicated mix of tactical, organizational, doctrinal, and technological innovations.[43] As RMA are the result of a will to change certain aspects of warfare, they are also susceptible to a degree of control unlike MR.[44]

The main driving force for RMA has been wars, but even in peacetime RMA has happened. Of course, changes in war tend to be of rapid nature while peacetime changes often require longer time.[45] To the allies (French and British) the German breakthrough in northern France, in the summer of 1940 appeared revolutionary.[46] It was however, the

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[41]Ibid., 12.

[42]Ibid.

[43]Ibid.

[44]Ibid.

[45]Ibid.

[46]Ibid.

result of applying the lessons learned, from analyzing the outcome of World War 1 coupled with the latest inputs from the Polish Campaign the year before.[47] In essence a long and deliberate process rather than a revolutionary change, the outcome of this change was however revolutionary. The allies had to adapt and change as the rules of warfare changed forever.

RMA is as an event or paradigm shift by one side that quickly renders some or all of an opponent's core competencies obsolete.[48] It can also be the creation of new core competencies that affect new dimensions of warfare.[49]

## Conclusions

The literature review contains a number of views on hybrid warfare, and it is therefore important to construct a definition of hybrid warfare that is fair and useable for this thesis. The chapter following this one will present a synthesis of what constitutes hybrid warfare, and working definitions for MR and RMA.

Many scholars like Huber, Murray and Knox, regard hybrid warfare as nothing more than a manifestation of what has been seen repeatedly through history. However, it is the opinion of this author that there are two important distinctions that set hybrid warfare, as defined by Frank Hoffman amongst others, apart from previous conflicts.

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[47]S. J. Lewis, "Reflections on German Military Reform," reprinted in US Army Command and General Staff College, *H200 Students Issue Advance Book* (Fort Leavenworth, KS: USACGSC, August 2011), H206RB-201-203.

[48]Richard O. Hundley, *Past Revolutions, Future Transformations–What Can the History of Military Revolutions Tell us About Transforming the U.S. Military?* (Washington, DC: RAND Corporation, 1999), 9.

[49]Ibid.

First, hybrid warfare does not require two forces, a conventional, and an unconventional, as was the case in Wellington's Spanish Campaign against Napoleon or Mao Zedong's Communist Revolution in China.

A single opponent such as Hezbollah in Lebanon can fight hybrid warfare. By employing both conventional and unconventional tactics and blending them seamlessly, a single opponent can create a hybrid threat and wage hybrid warfare. There is thus no need for the presence of two distinct forces to be able to wage hybrid warfare.

Secondly, hybrid warfare is not just simply the presence of two types of warfare, regular and irregular. It is the blending of the two, coupled with other activities removed from the actual battlefield, which creates a situation that neither is capable of accomplishing on its own. The sum of irregular and regular tactics is greater than the parts.

Using five questions raised by Hoffman in an article in *Armed Forces Journal* and the above conclusion, construction of a model of what constitutes hybrid warfare begins. The five questions raised concern modality versus structure, simultaneity, fusion, multimodality, and criminality.[50] Discussion of these questions continues in the next chapter, as they will be important in the analysis of hybrid warfare as a MR or a RMA, or something else.

[50]Hoffman, "Hybrid vs. Compound War."

# CHAPTER 3

## DEFINITIONS AND METHODOLOGY

> He who loves practice without theory is like the sailor who boards ship without a rudder and compass and never knows where he may cast.
>
> — Leonardo da Vinci, 1452-1519

Definitions for a number of subjects are necessary in order to do a qualitative study of hybrid warfare, to answer the question posed in the thesis. The definitions of Murray and Knox for Military Revolution and Revolution in Military Affairs are the basis for creating an analysis tool. Based on the literature review this chapter will define military revolution, revolution in military affairs and hybrid warfare.

In their book *The Dynamics of Military Revolution, 1300-2050,* Knox and Murray, provide a conceptual framework and historical context for understanding the patterns of change, innovation, and adaptation that have marked war since the fourteenth century. They do so by introducing two concepts, Revolution in Military Affairs and Military Revolution. The major difference between MR and RMA lies in the ways they have come to be and how they have influenced writing about warfare respectively.[51]

By categorizing the fields in which change has occurred in the past; such as technical innovation, innovative use of previous technology, and tactical changes, tools for analysis can be created. Examination of other phenomena not directly linked to tactics or technology such as social, economic, structural, and organizational will further help in defining hybrid warfare. The aim is to create a model with easily identifiable

[51]Knox and Murray, 179.

characteristics of MR and RMA, to show what type of changes are associated with RMA and MR, and then apply these criteria's to hybrid warfare.

Before digging deeper in the Murray and Knox concept of MR and RMA, a short overview can be helpful. Listed in table 1 are the MRs discussed by Murray and Knox together with the resultant and associated RMA.

Table 1. Relationship between Military Revolution and Revolution in Military Affairs and the different areas they Impacted

| Time period | Military Revolution | Possible RMA's (Resultant and associated) | Characteristics |
|---|---|---|---|
| 17th century | The creation of the modern state and of modern military institutions | Dutch and Swedish tactical reforms<br>French military reforms following the Seven Years War. Naval Revolution | tactical, organizational, cultural<br><br>tactical, organizational, administrative |
| 18th century | French Revolution | National political and economic mobilization | financial, organizational, conceptual |
| 18th–19th centuries | Industrial revolution: | Telegraph, smokeless powder, small arms, artillery, automatic weapons | financial, technological, organizational, cultural |
| 20th century | World War I: Combined arms (or combination of previous MR's) | Armored warfare<br>Submarine warfare<br>Aerial combat<br>Strategic bombing<br>Carrier warfare<br>Radar<br>Amphibious warfare | tactical, conceptual, technological, scientific, operational, organizational |
| 20th century | Nuclear weapons and ballistic missiles | Precision reconnaissance and strike<br>Computerization<br>Networking of C2<br>Massive increased lethality of conventional weapons | conceptual, technological, |

*Source*: Created by Author, information from MacGregor Knox and Williamson Murray, eds., *The Dynamics of Military Revolution 1300-2050* (Cambridge: Cambridge University Press, 2001), 13; Williamson Murray, "Thinking About Revolutions in Military Affairs," *Joint Forces Quarterly* (Summer 1997): 69-76.

As can be seen in table 1, MRs have often contained elements of RMA, or led to RMA. The interesting aspects for this thesis are in what areas these RMA have taken place. According to Murray, the areas where RMA have had an impact are tactical, operational, conceptual, organizational, cultural, administrative, financial, and administrative.[52] This means that in this thesis later analysis of hybrid warfare, these common areas can be useful to provide unity or integrity in the analysis.

## Military Revolution

When major changes affect a society, it is only natural that the military institution of that state also feels the effect of those changes. This makes MRs the natural result of political and social changes that have restructured societies and states.[53] MR's are the most powerful force changes known to the conduct of warfare, based on historical studies. They are unpredictable and uncontrollable, and they unleash fundamental changes to the framework of war. An obvious example would be the French Revolution, which in a few short years transformed France from an absolute monarchy to a Democratic Republic. This transformation released new forces that eventually made the new type of war fought by Napoleon possible.

MR results from major changes in societies such as revolutions, the creation of new types of states, or shifts from agricultural to urban-industrial societies.[54] These major changes have had effect on all aspects of a state's affairs, including the capability to wage

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[52]Williamson Murray, "Thinking About Revolutions in Military Affairs," *Joint Forces Quarterly* (Summer 1997): 69-76.

[53]Knox and Murray, 176.

[54]Ibid., 13.

war. Technological and political change has often followed, i.e. change in capability and reasons or willingness to go to war. Military Revolutions have the ability to affect the conduct of war. MR also affects the organization of the military and its administration. MRs have thus been cataclysmic events that have brought change of such proportions, that military institutions have struggled just to survive.[55]

Military Revolutions are a result of changes that affect all of human activity and not only warfare. They are therefore difficult to control in the sense that they will happen whether we want it or not, we ride the Military Revolution.[56] MRs have an inertial drive, and they tend to change the concept of war fighting in such radical ways, that there is little chance of reversing back to previous stages. A good example of the uncontrollable nature of MR are the enthusiasms and hatred that were unleashed on both sides at the beginning of World War I.[57] This passion and the initial losses on the battlefields meant that there was little chance of going back.

Because they are so uncontrollable, MRs are hard to predict and understand. This also means that understanding when a MR is happening and taking place, can be hard for the contemporary observer. Understanding and defining MR often requires the historical perspective. Additionally, humans tend to do two things; minimize the change that is occurring or overrate the nature of the change that is occurring. It is rare that they understand the significance of the large changes taking place at the time. It is therefore hard to accurately judge if the contemporary military structure is going through a MR.

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[55]Ibid., 176.

[56]Stephenson.

[57]Knox and Murray, 176.

Murray and Knox claims that five distinct Military Revolutions have taken place so far (see table 1).[58]

The seventeenth century creation of the modern state and of modern military institutions was the first MR, since or because this made conceptual changes possible. Amongst others, the creation of a new modern military community in the form of regiments is worth mentioning.[59] Certainly not the first form of military formation, the regiment nevertheless served as a focal point for its members in both war and peace. Regiments were in theory, a permanent formation that lasted longer than a campaign.[60] Regiments shifted military formations from aggregate contract armies to state commissioned armies.[61] They contributed to a standardization of units and were a major organizational change, but this change could not happen before the creation of the modern state.

Another MR was the result of the industrial revolution. It created the capacity to mass produce weapons and equipment, and the capacity to transport them and the soldiers, to the fronts faster and more efficiently. The new world created by the industrial revolution led to a never before seen level of violence and bloodshed. The modern world's capacity for uniting and directing whole nations' efforts in the pursuit of national goals, coupled with increased lethality on the battlefields, changed the face of warfare

[58]Ibid., 13.

[59]Ibid., 50.

[60]Ibid., 51.

[61]Ibid., 52.

forever. MRs are thus those periods of fundamental change to societies and politics that have not only allowed but also in some cases, forced military institutions to transform.[62]

Therefore, for this thesis the conclusion is that to determine the nature of hybrid warfare when using MR as a concept, there will have to be a case study of a known episode of hybrid warfare. Using a historical example facilitates searching for the components and features of the definition and discussion of MR provided to this point. This analysis will have to look for major changes in the society prior to the war to include social domains, type of government, recruitment methods, and any major organizational changes. The characterization of such changes will have to be from a qualitative perspective rather than a quantitative perspective, as they do not lend themselves to any easy quantification. Since MRs in the past were protracted events, taking many years before their impact could be measured, determining whether we are experiencing a MR due to hybrid warfare is a challenge. Another challenge to understanding a MR is that technology normally plays a minor role; instead, areas such as C2, organization, logistics, doctrine, and other non-material improvements are what define MRs. The challenge of recognizing a contemporary MR becomes even harder by the fact that we do not drive it, it drives us. This also means that a certain amount of subjectivity will be present in the analysis. As long as this is recognized and addressed, it will not pose a problem for the thesis.

[62]Knox and Murray, 176.

## Revolution in Military Affairs

While Military Revolutions are events having their own inertia and beyond control, Revolutions in Military Affairs are periods of invention and progress.[63] RMA are a result of a conscious effort to bring about a change in warfare**.** The ultimate goal of a RMA is to devise new ways of destroying your enemy.[64] A complex array of changes in tactics, organization, doctrine, and technological invention are required, in order to implement a RMA.[65] Table 1 outlines the linkage between MRs and Revolutions in Military Affairs. Granted not all Revolutions in Military Affairs are linear, far from it, and a large portion of trial and error has been the result of trying to develop new means to gain advantage over an enemy. When successful, Revolutions in Military Affairs are capable of changing war fighting. Examples include the introduction of gunpowder, or the use of the electromagnetic spectrum. Revolutions in Military Affairs also involve new ways of dealing with old problems.

The introduction of airplanes during the World War I is a good example of a Revolution in Military Affairs. Although artillery could reach beyond the immediate frontlines at this time, it was the advent of airplanes that gave armies the capability to effectively strike throughout the depth of an enemy's forces. In the later stages of the war, this ability to strike from the air even resulted in the first strategic bombers capable of striking the enemy's homeland.

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[63]Knox and Murray, 179.

[64]Ibid., 12.

[65]Ibid.

The breaking of the stalemate on the Western Front in 1918 heralded a new concept of warfare.[66] The German Storm Troopers of 1918 were successful not so much because of novel technology as by new uses of known technology, adapted to tactics in order to overcome the stalemate of the Western front. Therefore, a RMA can be the result both of novel technology**,** but also of new ways of doing business with old tools. The key being that with the introduction of a new concept there is no easy way of turning back to the ways things were before.

To analyze hybrid warfare from the aspect of RMA it is important to look both at the type of technology used, to determine if it is new or old. It will however, be equally important to analyze in what ways this technology is used, are new technologies simply used as a replacement for older systems and are older systems used in new ways? Of course, there were Revolutions in Military Affairs resulting from the MR caused by the industrial revolution.

The industrial revolution did not only provide means to mass-produce weapons, it also created new types of weapons. Examples include the machine gun and numerous types of gas used for chemical warfare. Improvement in chemistry also produced new types of explosives and propellant that were more powerful than the previous used black powder. New weapons like these were the result of technological, and chemical, advances made possible by industrialization, which brings us to RMA. Revolutions in Military Affairs have typically been the results of conscious efforts to change current war fighting, by the use of innovative technologies coupled with change in doctrine and tactics. Revolutions in Military Affairs are thus more controlled events compared to MR.

[66]Knox and Murray, 177.

Additionally, linked to RMA in the past there are three distinguishing characteristics. First, is the fact that technology alone has rarely driven Revolutions in Military Affairs, if anything it has worked more as a catalyst.[67] A good example of this is that technology alone was not the result of the French defeat at the hands of German Panzer divisions in 1940. In many respects, the French tanks of the day were more powerful than the German tanks. The defeat of the French Army owed more to another aspect of RMA, doctrine and concepts. A discussion on this follows further down.

Secondly, more often than not Revolutions in Military Affairs have been the result of evolutionary problem solving of specific operational and tactical issues, rather than revolutionary new concepts.[68] As strange as this may sound it is the result of successful innovators thinking in terms of fighting wars against actual, not hypothetical, enemies. By adopting this way of dealing with real world problems, solutions that present themselves will be actual capabilities, helping the pursuit of actual objectives, both political and strategic.[69]

Third, RMA are dependent on a foundation. This foundation is the coherent framework of doctrine and concepts that are realistic, i.e. built on working service cultures. According to Murray and Knox, successful RMA uses doctrine that acknowledges the fundamentally chaotic nature of war. This ties in to Clausewitz's views on warfare as a play of chance and probability with ever-present friction.[70] As mentioned

[67]Ibid., 192.

[68]Ibid.

[69]Ibid.

[70]Clausewitz, 89.

above German tanks of 1940 were not superior to French tanks, it was the doctrine used by the Germans that made the difference. By looking for the presence of the above characteristics in the 2006 Israeli-Hezbollah War, it will be possible to determine the presence and extent of RMA in hybrid warfare.

## Hybrid Warfare

Before proceeding to the historical case study, the issue of hybrid warfare beyond the discussion from the literature needs further resolution. Based on the research and literature available, the definition of hybrid warfare for this thesis will be: a war or a conflict fought by an adversary that uses a mix of conventional weapons, irregular tactics, terrorism, and criminal activities. The hybrid adversary uses this mix to reduce the advantage enjoyed by a conventional army over a smaller force. Coupled with this is a capability to extend the engagement beyond the battlefield itself. By using the five areas of Hoffman questions (see chapter 2), helps construct a set of tools to analyze hybrid warfare.[71]

The first area Hoffman addresses deals with modality versus structure: should the definition focus on the adversary's modes of fighting or his structure, i.e. combinations of states, non-state actors, and foreign fighters?[72] For this thesis, modality is the primary indicator of an enemy fighting a hybrid war. Modality in this perspective, and for this thesis, means that a force does not only fight based on his own strengths, he fights based

[71]Hoffman, "Hybrid vs. Compound War."

[72]Ibid.

on his opponents' weaknesses. It is the capability to not just adapt, but to adapt in a way that takes away some of the opponents' strength.

The second area Hoffman addresses is simultaneity. Does the force have to simultaneously employ the four different modes of conflict (traditional, irregular, catastrophic terrorism, and disruptive means,) or only demonstrate the capacity to employ all four during a campaign?[73] A synthesis of the areas and the means of fighting is a good indicator of how hybrid an adversary is. An enemy using the different modes of conflict seamlessly and overlapping creating a chain of events makes the case for hybrid warfare. For this thesis, a presence of more than just one of the capabilities meets the test of simultaneity.

Fusing is another area in which that Hoffman asks questions. Does the practitioner of hybrid warfare have to fuse different forces, regular and irregular, into the theater or must he mix different modes of conflict?[74] How much coordination between irregular and regular forces qualifies as hybrid war, and at what level of war? Based on literature studies, the fusing aspects of hybrid war are valid in that they show how hybrid war differs from conventional war. The definition of hybrid wars as a fusion of regular and irregular forces holds true. However, in combination with simultaneity, fusion also means that an opponent that consists of just one force, regular or irregular, can also fight hybrid warfare.

[73]Ibid.

[74]Ibid.

The question of multimodality ties into question two: Does an actor have to mix all four modes, or are three out of four sufficient to make it hybrid? [75] Yes, an actor should use at least three of the four, simply because using just two would be more reminiscent of compound warfare than actual hybrid warfare. At the same time, it is also important to understand the need for political motives to be the driving force to determine the type of conflict.

Finally, Hoffman addresses criminality: Is criminality a deliberate mode of conflict, or simply a source of income or support for gangs and the likes of the Taliban or the Revolutionary Armed Forces of Colombia (FARC) in Columbia.[76] Using criminality to raise funds to continue fighting and not just for personal gains, it can be seen as a method for enhancing the war fighting capability of a hybrid adversary. Criminality can also serve the function of shifting some of the opponents focus to crime fighting and even cause disruption in his financial system, which could in turn lead to a reduced capacity to wage war. Therefore, for this thesis the presence of criminality can be a sign of hybrid war, as long as the criminality is supporting the agenda of the enemy and not just a result of general chaos.

Hybrid warfare could be the result of novel technology or novel ways of using existing technology. However, other factors such as the emergence of non-state actors capable of operating in an expanded, even global domain could also cause asymmetric or hybrid solutions. The increased willingness of modern states and coalitions to intervene

[75]Ibid.

[76]Hoffman, "Hybrid vs. Compound War."

in ongoing wars for utilitarian reasons coupled with immense differences in technology, can also create a hybrid response.

## Construct, Synthesis, Conclusion

To be able to correctly label hybrid warfare in the analysis portion of this thesis a concluding summation of chapter 3 will facilitate the process. By labeling and organizing the conclusions so far, examining the case study is feasible.

When deciding if hybrid warfare is the result of a Military Revolution the case study will focus on the following areas:

1. Changes or shift in society prior to the war, which have changed or affected the capabilities to wage war.
2. Shifts in type of government or governance, this will include types of governing bodies in lieu of an organized state.
3. Changes in recruitment methods and training procedures.
4. Any major organizational changes to the state (governing body) and its armed forces.

When deciding if hybrid warfare is the result of a Military Revolution the case study will focus on the following areas:

1. Is there any changes to tactics to counter an enemy capability, and if so has this rendered the enemy capability null and void?
2. Has there been a change to doctrine and if so, is training and education implementing this change?
3. Was there use of new technologies, if so which?

4. Has old technology been used in novel ways, i.e. in a way they were not intended from the beginning?

By using the above questions, the analysis portion of this thesis will yield an answer to the question; what is hybrid warfare: a Revolution in Military Affairs, a Military Revolution, or something else?

# CHAPTER 4

# ANALYSIS

> Soldiering, my dear madam, is the coward's art of attacking mercilessly when you are strong, and keeping out of harm's way when you are weak. That is the whole secret of successful fighting. Get your enemy at a disadvantage; and never, on any account, fight him on equal terms.
>
> — George Bernard Shaw, *Arms and the Man*

The case study used in this chapter will facilitate the analysis of hybrid warfare according to the question asked in this thesis. The case study uses the Israeli-Hezbollah War of 2006. The war between Israel and Hezbollah is by many scholars used as an example of hybrid warfare, which makes it suitable to use for analyzing purposes.[77] The fact that both Hezbollah as well as Israel have commented on the conflict in open sources, also makes it interesting as a case study. Together with analyses from other parties, such as the U.S., this is a foundation for a valid analysis. Various analyses of the 2006 war, have characterized Hezbollah as conducting hybrid war. It is therefore natural that the analysis of this thesis that Hezbollah will be the focus, when examining the question of hybrid war as a MR or a RMA.

## Background to the 2006 War

The war in southern Lebanon of 2006 involved a state actor, Israel, and a non-state actor, Hezbollah. More than one writer has used it as an example of hybrid warfare. One reason for this is that, what on paper seemed as a situation where Israel had all the

[77]See for example David E. Johnson, "Military Capabilities for Hybrid War: Insights from the Israel Defense Forces in Lebanon and Gaza" (Occasional Paper, RAND Corporation, 2010), http://www.rand.org/pubs/occasional_papers/OP285.html (accessed 26 October 2012).

advantages of a modern army at its disposal turned out in favor of the Hezbollah. Hezbollah was, and still is, considered a terrorist organization and backed by Syria and Iran.[78] Although capable of guerilla style warfare, Israel did not expect Hezbollah to be capable of standing its ground against the IDF. However, after 34 days of conflict the fact was that Israel did not achieve its primary goal of defeating Hezbollah and Hezbollah was still in control of Southern Lebanon.

The roots of the conflict go back to the establishment of the state of Israel in 1948. Because of its strained relations with its northern neighbor, Israel has invaded Lebanon several times. However, it was when Israel's latest occupation of Lebanon ended in 2000, after which Israel withdrew its forces, a new borderline was established that led up to the war of 2006. The United Nations Security Council endorsed this new borderline called the "Blue Line," with the intent to allow the Lebanese Government to regain control of its territory.[79] As events would show, another power within Lebanon, Hezbollah, used Israel's withdrawal to strengthen its positions. The Lebanese Government could not, or would not send troops to police southern Lebanon, leaving the area open to Hezbollah influence.[80]

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[78]US Department of State's Foreign Terrorist Organizations, released 8 April 2008.

[79]Matt M. Matthews, The Long War, Series Occasional Paper 26, *We Were Caught Unprepared: The 2006 Hezbollah–Israeli War* (Fort Leavenworth, KS: Combined Arms Center, Combat Studies Institute Press, 2008), 15.

[80]Ibid., 16.

Hezbollah used this lack of governance to its full potential, effectively creating a state within the state.[81] Not only did Hezbollah strengthen its control of southern Lebanon through military power, it also increased its power by taking social responsibilities among the local communities. Schools, medical facilities, the care for widows, the elderly, and so on, helped Hezbollah retain control of the area and its population. Coupled with this, Hezbollah filled the role of a security force effectively policing southern Lebanon and maintaining stability within the community.[82] Not intended solely for policing functions, this military capability's ultimate function was to challenge the Israeli presence in Lebanon.

Cross border attacks were common, and Hezbollah specifically tried to seize prisoners to be used for prisoner exchanges. Hezbollah also prepared for what they saw as an inevitable confrontation with Israel on Lebanese soil in the future, by extensive defensive preparations. Their military philosophy revolves around the guerrilla-based concept of "Muslim resistance."[83] This concept means that Hezbollah considers its fighters to have both a military and civilian role, living among the civilians but being part of a military strategy.[84] Considered a defensive strategy by Hezbollah, the anticipated course of action was that any Israeli attack against Hezbollah militants hiding within the

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[81]Hussain Abdul-Hussain, "Hezbollah: The State within a State," *Current Trends in Islamist Ideology* 8 (2009), http://www.currenttrends.org/research/detail/hezbollah-the-state-within-a-state (accessed 26 October 2012).

[82]Ibid.

[83]George Emile Irani, "Irregular Warfare and Non-State Combatants: Israel and Hezbollah," *FRIDE* (October 2007), http://www.comw.org/rma/fulltext/0710irani.pdf (accessed 26 October 2012), 2.

[84]Ibid.

civilian population would lead to immediate retaliation.[85] After steadily rising tensions between Israel and Hezbollah, the conflict reached a culmination point when Hezbollah forces ambushed an Israeli patrol and kidnapped two Israeli soldiers on the 12 July 2006.[86]

## Hezbollah before the War

Prior to the eruption of full-scale war, Hezbollah had been active in the area trying to challenge Israeli power and thus strengthen its own influence in southern Lebanon. Under its influential leader, Nasrallah, Hezbollah began building into an organization standing on two pillars. One pillar was its powerful armed militia that focused on the struggle with Israel, and the other was the organization's political and social activities, which aimed at improving the lives Lebanese Shi'a.[87] Despite being often characterized as a non-state actor, Hezbollah incorporated some capabilities that would normally be attributed to traditional states. Among other things, Hezbollah engaged in communal activities such as providing medical care, support to the elderly and infirmed, helping widows, and caring for children's education. Hezbollah is for this reason, and others, regarded as a state within a state.[88] It is important to understand how this differentiates Hezbollah from other violent groups.

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[85]Irani, 2.

[86]Matthews, 34.

[87]Eyal Zisser, "Nasrallah's Defeat in the 2006 War-Assessing Hezbollah's Influence," *Middle East Quarterly* 16, no. 1 (Winter 2009).

[88]Anthony H. Cordesman, *Preliminary "Lessons" of the Israeli-Hezbollah War* (Washington, DC: Center for Strategic and International Studies, 2006), http://csis.org/files/media/csis/pubs/060817_isr_hez_lessons.pdf (accessed 31 October 2012).

In preparation for fighting the Israeli Defense Forces (IDF), Hezbollah conducted an analysis of Israeli capabilities and its will to fight.[89] For a number of various reasons, the analysis concluded that Israel was not likely to be able to take the amount of causalities it had suffered in previous wars. Based on this analysis Hezbollah found it likely that IDF would rely extensively on standoff capabilities and weapons. This would include precision strikes from the air and using artillery whenever possible.[90] A consequence of this was that Hezbollah would have to disperse its assets to make targeting harder for the Israelis. Concealing weapons and munitions underground in bombproof shelters also became imperative.

One of the systems that Hezbollah prepared to use against an Israeli attack was rockets. Iran and Syria supplied these, and trained Hezbollah fighters to operate them.[91] By 2006, some estimates put the number of rockets available to Hezbollah at between 12,000 and 13,000.[92]

Hezbollah had also developed 13 principles of war, specifically designed to defeat a relatively fixed, technologically advanced enemy. The 13 principles are a testament to the thoroughness by which Hezbollah analyzed its archenemy.

1. Avoid the strong, attack the weak—attack and withdrawal!
2. Protecting our fighters is more important than causing enemy casualties!

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[89]Matthews, 16.

[90]Ibid.

[91]Ibid., 17.

[92]Andrew Exum, "Hizballah at War-A Military Assessment," *The Washington Institute for Near East Policy*, December 2006, http://www.washingtoninstitute.org/policy-analysis/view/hizballah-at-war-a-military-assessment (accessed 29 November 2012).

3. Strike only when success is assured!
4. Surprise is essential to success. If you are spotted, you have failed!
5. Do not get into a set-piece battle. Slip away like smoke, before the enemy can drive home his advantage!
6. Attaining the goal demands patience, in order to discover the enemy's weak points!
7. Keep moving; avoid formation of a front line!
8. Keep the enemy on constant alert, at the front and in the rear!
9. The road to the great victory passes through thousands of small victories!
10. Keep up the morale of the fighters; avoid notions of the enemy's superiority!
11. The media has innumerable guns whose hits are like bullets. Use them in the battle!
12. The population is a treasure-nurture it!
13. Hurt the enemy and then stop before he abandons restraint![93]

In many ways, the principles resemble Chairman Mao's writings on guerilla warfare.[94]

The violence of the Israeli reaction to the kidnapping of two of its service members came as a surprise to Hezbollah.[95] However, Hezbollah was still well prepared to fight Israel, since they had spent the previous years preparing for a confrontation. Hezbollah's operational concept entailed both defensive and offensive elements. The

[93]Ya'ari Ehud, "Hizballah: 13 Principles of Warfare," *The Jerusalem Report*, 21 March 1996, in Daniel Isaac Helmer, *Flipside of the COIN: Israel's Lebanese Incursion Between 1982–2000* (Fort Leavenworth, KS: Combat Studies Institute Press, 2006), 53-54.

[94]Paul H. B. Godwin, "People's Revolutionary War: Mao and the Chinese Experience" (Air University Press, June 1988), reprinted in US Army Command and General Staff College, *H300 Students Issue Advance Book* (Fort Leavenworth, KS: USACGSC, November 2011), 107-114.

[95]CNN, "Nasrallah: Soldiers' Abductions a Mistake," 27 August 2006, http://articles.cnn.com/2006-08-27/world/mideast.nasrallah_1_hezbollah-leader-hassan-nasrallah-hezbollah-militants-israeli-soldiers?_s=PM:WORLD (accessed 28 October 2012).

operational concept also blended regular and irregular elements.[96] According to Frank Hoffman, this was what made the war hybrid.[97]

In short, the ends, ways, and means of Hezbollah are as follows. The overarching strategic objective for Hezbollah was to destabilize the Lebanese Government while further legitimizing the Hezbollah Party's power base internationally.[98] One operational objective (means) in pursuit of this strategic objective had already been reached with the Israeli Forces withdrawal from Lebanese soil, which had been portrayed as a Hezbollah victory in its propaganda.[99] Hezbollah was preparing for renewed confrontations with Israel and was planning to inflict heavy losses on Israel, by drawing the IDF into a protracted ground war. The means for this would be building sufficient reserves, seize Israeli troops as bargain chips for prisoner exchange, and target Israeli civilians with unrelenting rocket attacks.[100]

## Israel before the War

In the years preceding the 2006, War the IDF had undergone a shift in its strategic approach to conflict. After pulling out of Lebanon in 2000, the IDF prepared for the event of a conflict with Hezbollah in the future. At the same time, the Second *Intifada* led to

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[96]Sjoerd Both, "The Hezbollah enigma," Netherland Defense Academy, 2009, http://hbo-kennisbank.uvt.nl/cgi/nda/show.cgi?fid=1342 (accessed 1 November 2012), 104.

[97]Hoffman, *Conflict in the 21st Century*.

[98]Zisser.

[99]Ryan T. Carron, "Hezbollah: Operational Art in Fourth Generation Warfare" (Research paper, Naval War College, Newport, RI, October 2006), 4.

[100]Ibid.

unrest in the West Bank and the Gaza Strip. The *Intifada* had several effects on Israeli preparations for future operations. The necessity to keep a large number of troops deployed to deal with the unrest hampered training efforts.[101] It also made Israeli officers focus on counterinsurgency warfare, losing experience in doing other types of military operations. Additionally, the *Intifada* incorporated small-scale clashes with unit sizes on the Palestinian side seldom bigger than squad size. All this hampered Israeli preparations and understanding of what would come.

Another major change for the IDF was the shift towards theories of precision firepower, Effect Based Operations (EBO), and Systematical Operational Design—two theories that came out of the concept of Network Centric Warfare. According to Israeli Brigadier General Shimon Naveh, whose Operational Theory Research Institute came up with the planning tool of Systematical Operational Design. Systematical Operational Design would help commanders "to think critically, systemically, and methodologically about war fighting." The design focused "on the concept of the 'enemy' and provides operational commanders with tools to conceptualize both their enemies and themselves for the purpose of designing suitable campaigns."[102]

In 2001, the publication of a White Paper by U.S. Joint Forces Command formulated the desire of EBO to affect the cognitive domain of the enemy and his systems rather than annihilating his forces.[103] EBO proposed that in modern war, taking

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[101]Matthews, 22.

[102]Ibid., 24.

[103]Edward A. Smith, "Effect Based Operations: Applying Network Centric Warfare in Peace, Crisis, and War" (Washington, DC: The Command and Control Research Program, 2002).

place in the information age and with unrivaled precision, it would be sufficient to destroy certain parts of an enemy to achieve victory.[104] Furthermore, the targets should not be the traditional front line troops but rather command and control nodes, communication assets, logistic trails, and related capabilities. The roots of this view on warfare came from U.S. Air Force theorist John Warden who advocated precision strikes.[105]

By dividing the enemy into five concentric rings of systems with leadership at the center and military forces as the outer ring, Warden suggested that precision strikes aimed at destroying key nodes and functions in the enemy's system, a collapse of the enemy's capability to resist would ensue.[106] Another attractive feature with the EBO theory was that precision would lead to a reduction in one's own causalities, as the use of standoff weapons would increase. The precision of the weapons employed would also lead to fewer ground battles and a reduced risk of collateral damage.[107] The embracing of a new war fighting doctrine based on precision strikes, coupled with the experiences of the *Intifada* led the IDF to believe it would fight an insurgent type of enemy when and if war broke out between Hezbollah and Israel.

Israel intelligence monitored the buildup of Hezbollah in southern Lebanon, and knew that Hezbollah was gaining capabilities that it previously did not have. However,

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[104]Ibid.

[105]Matthews, 23.

[106]John A. Warden III, "Enemy as a System," *Airpower Journal* 54, no. 1 (Spring 1995): 40-55.

[107]Matthews, 23.

this did not lead to a change in how the IDF perceived the next war. Israel's long-standing goal was the disarming of Hezbollah in accordance with United Nations resolutions.[108] When war broke out in 2006, the goal became the destruction of Hezbollah, by elimination of its military capabilities, especially missile capabilities, and the restoration of the captured soldiers.[109]

## The 2006 War

The Lebanon War of 2006 lasted a mere 34 days but had a significant impact on the world of warfare. Before going into details, a quick overview of the most important events will help the reader to understand the unfolding of the war.

The war began with the kidnapping of two Israeli soldiers on 12 July. Within 24 hours, the Israeli Air Force had launched an air campaign striking targets throughout Lebanon, to include the international airport of Beirut. Hezbollah responded with a barrage of short-and medium-range missiles, striking mainly civilian targets throughout northern Israel. The situation deteriorated so fast that many western countries, including the U.S., decided to start evacuating nonessential personnel and civilians from Lebanon already on 18 July. Only a few days later on 22 July Israeli ground forces entered Lebanon only to quickly run into problems. Israeli casualties quickly mounted and between 10 and 12 August an Israeli combined arms attack ended in the destruction of at

[108]United Nations, Security Council Resolution 1559, *Security Council Declares Support for Free, Fair Presidential Election in Lebanon; Calls for Withdrawal of Foreign Forces There*. Security Council 5028th Meeting, 9 February 2004.

[109]Hany T. Nakhleh, "The 2006 Israeli War on Lebanon: Analysis and Strategic Implications" (Strategy Research Project, Army War College, Carlisle Barracks, PA, March 2007), 6.

least 12 Israeli main battle tanks (MBTs) for little or no gain. Together with the relentless rocket attacks on civilian targets and under mounting international and internal pressure, the Israeli Government settled for a cease-fire on 14 August 2006.[110]

In the morning hours of 12 July 2006 an IDF patrol consisting of two vehicles was ambushed during a patrol along the Blue Line. A Hezbollah Unit had infiltrated onto the Israeli side of the border with the intent of capturing Israeli soldiers. The Hezbollah operation met with success and by the time the IDF realized what had happened, the Hezbollah Unit had returned into Lebanon carrying two prisoners.[111] The IDF' response was to engage preregistered targets within Lebanon with artillery. After being alerted a force consisting of MBTs and Infantry fighting vehicles began a pursuit. This force immediately ran into problems as an improvised explosive device destroyed one of its MBT's killing its four occupants.[112] The IDF now reverted to a contingency plan calling for a 48 to 72 hour bombing campaign, followed by a ground assault into Lebanon, to free its soldiers.

As previously stated, the violent Israeli response took the leader of Hezbollah, Nasrallah, by surprise.[113] Israel targeted Hezbollah assets throughout Lebanon in an effort to cause a system collapse in accordance with EBO. The initial results were

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[110]Mohamad Bazzi, "Hezbollah Cracked the Code," *InfoSec News*, 18 September 2006, http://www.infosecnews.org/hypermail/0609/12129.html (accessed 10 November 2012).

[111]Matthews, 34.

[112]Ibid.

[113]Mark Perry and Alastair Crooke, "How Hezbollah Defeated Israel: I. Winning the Intelligence War," *Asia Times*, 12 October 2006, http://www.conflictsforum.org/2006/how-hezbollah-defeated-israel/ (accessed 29 November 2012).

promising with a number of Hezbollah rocket emplacements destroyed; leading the Israelis to believe that the effect would be that Hezbollah would withdraw and disarm.[114] Although Israel's reaction to the 12 July attack on its patrol came as an unpleasant surprise to Hezbollah, the organization was surprisingly well prepared to fight Israel in a coherent way.[115]

Initially Israel tried to solve the issue by standoff weapons. Although hitting a number of Hezbollah positions, this did not stop the rocket attacks on Israel. Initial U.S. estimates suggested that Israel only managed to hit seven percent of Hezbollah's military resources.[116] It soon became clear to the military leadership of Israel that airpower alone was not going to win the war. If Israel were going to achieve its goals for the war and the safe return of its soldiers, it would have to mount a large-scale ground offensive.[117]

The ground war started on 17 July. The first goal was to establish an initial foothold on Lebanese soil.[118] Israeli Special Forces soon found themselves surrounded by an enemy they had expected to retreat, as soon as Israeli forces confronted them. "They are not fighting like we thought they would, they are fighting harder. They are good on their own ground" was the verdict of one Israeli Soldier.[119] Instead of just hunkering down or dispersing when confronted, Hezbollah units used fire and maneuver to contest

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[114]Matthews, 37.

[115]Both, 105.

[116]Perry and Crooke.

[117]Matthews, 39.

[118]Ibid., 43.

[119]Ibid., 44.

Israeli pushes into Lebanon. Hezbollah's stubborn defense and mounting Israeli losses led to the call up of reserves.[120]Although reserves were called upon, the IDF continued infiltrating smaller units into Lebanon with little success. Whenever armored forces supported the ground assault they suffered heavy losses to Hezbollah antitank weapons.[121] In an effort to strike at the cognitive domain of Hezbollah, the IDF decided to attack the village of Bint Jbeil.[122]

Hezbollah used Bint Jbeil as backdrop when the organization, in 2000, proclaimed victory after Israel's withdrawal from Lebanon.[123] Nasrallah himself had delivered the speech, so a victory in Bint Jbeil would be a blow to Hezbollah, not only militarily but also psychologically. To strike an enemy not only physically but also psychologically is in accordance with the theories of EBO. However, using only a single battalion to capture a fortified town that had more than 5000 houses in its old quarter alone, proved a daunting task for the IDF.[124]

Hezbollah made use of an operational concept that contained defensive and offensive components, which in their turn relied on both conventional and irregular elements. Thus, according to Hoffman, the Second Lebanon War is an example of a hybrid war.[125] Operating from well-prepared defensive positions and employing the 13

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[120]Ibid.

[121]Exum, 11.

[122]Matthews, 45.

[123]Ibid.

[124]Ibid., 47.

[125]Hoffman, *Conflict in the 21st Century*.

principles laid forth by its leadership, Hezbollah put up a surprisingly effective defense. It was well coordinated and made the most of the vulnerabilities it had identified in the IDF capabilities.

In the battle for Bint Jbeil, the narrow streets of the old village hampered armor movement forcing Israeli forces to fight with infantry only. This negated many of the IDF' advantages and presaged a different fight than the army had trained for.[126] Although supported by artillery and air power, the combined arms capability made up of armor and infantry began separating. Israeli Armor moved to support infantry units from high points in the surrounding hills but soon ran into problems. Armor units deployed in the open to negate the risk of Hezbollah units using rocket propelled grenades (RPGs) closing in and ambushing MBT's and Infantry Fighting Vehicles. By doing so, they became vulnerable to long range weapons employed by Hezbollah. Modern anti-tank missiles of both western and Russian origin took a heavy toll, destroying many Israeli MBTs.[127] Even the latest version of the *Merkava* MBT boasting state-of-the-art composite armor, were vulnerable to MILAN's, TOW's, AT-4's, and AT-5's, and Israeli losses started to mount up.[128] Surprisingly, Hezbollah was able to maneuver and fire despite Israeli artillery and airpower. For IDF this was a different experience. This was the first Arab enemy they fought that was capable of sound and efficient tactical execution and maneuver under fire.[129]

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[126]Exum, 10.

[127]Both, 105.

[128]Ibid.

[129]Exum, 10.

Part of this shift in proficiency was the result of Hezbollah's small unit commanders enjoying greater autonomy and encouragement to take the initiative, according to the 13 principles laid out by Hezbollah. Units were also encouraged to carry provisions and ammunition for a four to five week campaign, which gave a small logistical footprint and which enabled more agile maneuvering.[130] This type of agility comes at a price though. Typically, small independent units are unable to coordinate actions and operate in units above a company, in size. This also means that small units of the Hezbollah were not coordinated enough to be able to support each other in the same way that IDF units were.[131]

By 5 August, the IDF had approximately 10,000 soldiers in southern Lebanon. However, after three weeks of ground war Israeli Troops managed to penetrate no farther than four miles. Remarkably, the border zone remained unsecured, as did the town of Bint Jbeil.[132] On 10 August, an Israeli armored column tried to break the Hezbollah resistance by advancing into the strategic important valley of Vadi Salouqi. This valley runs north south and effectively divides southern Lebanon. Two days of battle left more than 12 Israeli tanks destroyed by a combination of anti-tank rockets, anti-tank missiles, and improvised explosive devices.[133] The attack up the valley had failed and two days later, a cease-fire ensued.

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[130]Ibid.

[131]Ibid.

[132]Matthews, 50.

[133]Exum, 11.

## Summation

In the 2006 War in Lebanon the world might have witnessed the birth of hybrid warfare. In the war, Hezbollah demonstrated a number of skills and state-like military capabilities including a mix of both short range and medium range rockets. Hezbollah also used a wider array of anti-tank weapons than had been seen in the region before. Hezbollah even managed to hit the Israeli Navy ship Ahi Hanit with an anti-ship cruise missile putting it out of commission and killing a number of its crewmembers, although she managed to get to port.[134]

Hezbollah's anti-tank weapons included the Russian made RPG-29, a dual warhead version of the standard rocket-propelled grenade, capable of three times the penetration than the RPG-7. They also used a number of Russian built anti-tank missiles including the KORNET with a range of over three miles and a very powerful warhead, and equipped with thermal sights as well as Western missiles such as the MILAN and the TOW.[135]

Sources also speak of the successful intelligence campaign waged by Hezbollah. Hezbollah even managed to launch unmanned aerial vehicles although the Israelis soon downed them.[136] There is also evidence that Hezbollah had invested in signals

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[134]Israel Ministry of Foreign Affairs, "Summary of Attack on IDF Missile Ship," 15 July 2006, http://www.mfa.gov.il/MFA/Terrorism-+Obstacle+to+Peace/Terrorism+from+Lebanon-+Hizbullah/Summary+of+attack+on+IDF+missile+ship+15-Jul-2006.htm (accessed 15 November 2012).

[135]Matthews, 92.

[136]Both, 105.

intelligence and had monitored IDF cell phone calls for some time, as well as unconfirmed reports that they managed to de-encrypt radio traffic.[137]

Hezbollah's real advantage though lay in the fact that they had ample time to study their enemy and prepare a defense designed to deprive Israel of some of its advantages. The decentralized C2 together with sufficient training paid off. By fighting from prepared positions and equipped with a range of modern weapons that included anti-tank and anti-ship missiles, night vision equipment, and computer assisted targeting; small Hezbollah units were able to maintain stiffer resistance than expected.[138] None of Hezbollah's actions or technologies was completely new to warfare. The context in which Hezbollah used them made them hybrid.

Not mentioned earlier is Hezbollah's conscious effort to export the war through news media and put pressure on Israel from the International community.[139] The battle of ideas and public opinion has always been a central struggle within an insurgency, but in the past governments had some advantages.[140] Today's modern information technology enables an insurgent to exploit even a modest success, and helps him reach thousands if not millions of viewers and listeners creating support for his cause. In the 2006 war, Hezbollah television stations were able to reach millions of viewers transmitting its point

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[137]Perry and Crooke.

[138]Jeremy M. Sharp, Christopher Blanchard, Kenneth Katzman, Carol Migdalovitz, Alfred Prados, Paul Gallis, Dianne Reeenack, John Rollins, Steve Bowman, and Connie Veillette, *Lebanon: The Israel-Hamas-Hezbollah Conflict* (Washington, DC: Congressional Research Service, 2006).

[139]Perry and Crooke.

[140]Frank G. Hoffman, "NEO-COIN?" *Small Wars Journal*, 24 June 2007, http://smallwarsjournal.com/blog/neo-coin (accessed 14 November 2012).

of view. Being a social movement, Hezbollah's struggles to frame problems and injustices in a way that convinces a wider audience to address the issue and influence its outcome.[141] To Hezbollah television is an essential tool in this struggle. Not only can television influence external parties and engage them in the conflict and perceived injustices, it can also serve as a morale and psychological enhancer for its own members. By launching mobile rockets from mosques, schools, and other civilian and protected infrastructure Hezbollah virtually ensured that Israel would inflict collateral damage ending in civilian casualties.[142] Using media, Hezbollah could then exploit these casualties to bolster support for its cause and recruitment to its ranks.

In essence, Israel failed to understand that it was fighting a guerilla force in possession of state capabilities.

## Hybrid Warfare and Military Revolution

Looking for indications that the hybrid war waged by Hezbollah was the result of MR is a challenge. In all fairness, military revolutions have been notoriously hard to understand and comprehend as they happen. As mentioned in chapter 3 it has often required the light of historical studies to understand changes in the past. One transformation we are all experiencing today is the information technology-revolution. This could be a change that eventually leads to a MR, as smaller actors will have greater international impact because of easier access to media.

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[141]Diane S. Cua, "An Analysis of Hizbullah's use of Media" (Thesis, Naval Postgraduate School, Monterey, CA, September 2007), 47.

[142]Sarah E. Kreps, "The 2006 Lebanon War: Lessons Learned," *Parameters* (Spring 2007): 72, http://www.carlisle.army.mil/usawc/parameters/Articles/07 spring/kreps.pdf (accessed 14 November 2012).

Nevertheless, what follows is a methodical step-by-step process where the conclusions of chapter 3 are applied to the case study one by one, to determine similarities between hybrid warfare and MR. The areas researched will be Society, Governance, Recruiting and Training.

## Society

When looking at the society from which Hezbollah had risen, and in which it operated, for indications of changes or shift in society prior to the war, very little apart from Israel's withdrawal is apparent. Conflicts plagued Lebanon since the mid-seventies and there were no effective state controls over southern Lebanon. In the power vacuum after Israel's withdrawal in 2000 Hezbollah moved in and used this opportunity to build the organization's power. Support for Hezbollah came from the regions predominantly Shi'a Muslim population and from external actors, such as Syria and Iran. However, apart from this, prior to the war there were no major shifts in the societal structure of southern Lebanon or Lebanon as a whole. A shift in the social structure could be a precursor to changes in war fighting capabilities according to the concept of MR. A shift of such magnitude is not identifiable.

## Governance

The Second Lebanon War did not evince any shifts or changes in the governing body of Hezbollah to qualify as a MR. After Israel's withdrawal; Hezbollah paid close attention to the evolving situation, analyzed it, and planned accordingly. Regardless of Hezbollah's status as a state within the state, there are still areas of stewardship that lies beyond the reach of its leaders. Hezbollah does not have access to the resources of state,

in that it controls and governs the state apparatus. It has no ties to or recognition by the majority of the world powers. It does not control the majority of the population. Compared to the major shifts in society and government, for example, the French Revolution, any shift within Hezbollah leadership and management shrinks in comparison.

Hezbollah leadership has always derived its authority from divine powers.[143] In doing so, the necessity to reinvent itself or change its leadership style is not as important as it is put in place by the grace of God. For this reason alone, there seems to be no need for change and thus it would not be possible to trace any MR influences on the hybrid war fought by Hezbollah.

The 13 principles laid forth are not a sign of changes in leadership or governance but rather the result of a thorough analysis of the strength and weaknesses of oneself and one's opponents. The 13 principles are in fact sound principles for any guerilla type force when fighting a superior enemy. No major shift in type of government or governance affected Hezbollah prior to the 2006 war.

## Recruiting and Training

Of the enemies that Israel faces today, arguably Hezbollah is among the most well trained and highly motivated forces in the region.[144] Is this the result of a shift in recruiting and training doctrine though? Probably not, recruiting takes place among the

[143]Stand With Us, "An Open Letter, The Hizballah Program," 16 February 1985, http://www.standwithus.com/pdfs/flyers/hezbollah_program.pdf (accessed 21 November 2012).

[144]Johnson, 6.

local Shia population based on the sentiments of the locals. The local population perceives Hezbollah as the sole provider of necessary stability and protection in the region. Hezbollah also provides defense against Israeli aggression. There have been no major changes in recruiting techniques for Hezbollah in the past several years. The methods and reasoning when recruiting reflect congruence with most resistance movements around the world.

As far as training is concerned, Iran in particular aids and trains the organization.[145] This training has dealt with practical skills for operating complex modern weaponry such as unmanned aerial vehicles and anti-ship missiles. However, the majority of Hezbollah's training prior to the war was under the supervision of Hezbollah's own military wing. This training took place within Lebanon in the same way as had been exercised before.[146]

Once again, although there might be shifts in the conduction of various aspects of Hezbollah day-to-day operations, there is no evidence that these changes were the result of a MR. Based on the case study, it is very hard to find any evidence that the hybrid war waged by Hezbollah could be the result of a military revolution, rather it is the result of natural evolution and adaptation to its own assets and Israeli threats. This means that the hybrid war fought by Hezbollah has its roots elsewhere.

[145]Exum, 7.

[146]Ibid.

## Hybrid Warfare and Revolution in Military Affairs

In addition to the technological achievements that are perceived as making up a modern RMA—precision guided weapons that with pinpoint accuracy destroys targets, information systems that provide unlimited and immediate access to intelligence, faultless communications, ability to navigate anytime anywhere, and a general transparency of the battlefield—there are other factors as well. The emergence of powerful non-state actors capable of asymmetric responses could be as upsetting to the equilibrium as the latest and most powerful means fielded by state actors. To consider new technologies an essential part of many Revolutions in Military Affairs is sometimes necessary, but innovative use of old technology could also be part of a RMA. In some cases, like the Napoleonic Wars, technology plays almost no role in the creation of a RMA. So, too, can new tactics and doctrinal procedures comprise an RMA, as described in the discussion of the Murray and Knox definition used by this analysis. Based on the conclusions of chapter 3, the areas researched for evidence of Revolutions in Military Affairs are Tactics, Doctrine, Training, and Education, and Technology (new and old).

### Tactics

When looking at tactics and the case study from a RMA perspective, the interesting question will be if there were any incidents of Hezbollah tactics that rendered Israeli capabilities useless. If so, these tactics should be the result of evolutionary rather than revolutionary progress. They should also show elements of innovative concepts. Many of the tactics used by the Hezbollah were new, in the sense that IDF did not anticipate them. Hezbollah's decision to stand their ground and not retreat at the first

contact with IDF units upset, the IDF belief that they were dealing with a guerilla type enemy lacking in training and skills.

As with any insurgency, Hezbollah based some of its ability to hold ground on their ability to blend with the local population. This was a deliberate tactic not only designed to protect own assets but also meant to cause Israeli responses to hit civilian targets. In the struggle against insurgencies, this is not new. In modern times, insurgents fighting in Algeria, China, Vietnam, Latin America, Iraq, and Afghanistan have all used the same tactics. Mao expressed it as "The guerrilla must move amongst the people as a fish swims in the sea."[147] Meaning that in order to survive and be able fight a stronger foe, the guerilla has to become hard to distinguish from the general population. The Hezbollah's decision to fight close to civilian facilities and personnel is not unheard of in warfare. It was the natural result of the terrain itself, which gave Hezbollah its best chances of defense close to the border, and its villages, coupled with a cynical decision to force Israeli targeting that would inevitably cause civilian casualties.

By operating close to and among civilians Hezbollah made Israeli goals hard to accomplish. It did not however render Israeli capabilities null and void. Israel would and had to take into consideration the possible collateral damage and double effect of operating and targeting close to civilians. As any modern democracy, Israel is well aware of the implications of killing civilians even if it happens by accident. An incident involving civilian casualties quickly becomes propaganda in support of the enemy. There are also the legal aspects of what an army may and may not do in combat. The bottom line, though, is that although Hezbollah tactics made it harder for Israel to respond, the

[147]Godwin, 107-114.

decision to respond still lay with the Israelis. Israel did not lose its ability to strike back; it only lost its tempo in striking back, as targets had to be cleared up the chain of command.

## Doctrine, Training, and Education

As far as a doctrine in the context of a clearly stated Western definition, consider the following from the North Atlantic Treaty Organization doctrine: "fundamental principles by which military forces guide their actions in support of objectives. It is authoritative, but requires judgment in application."[148] Comparing what Hezbollah used to this rubric shows us Hezbollah did not have a doctrine in this sense. This is not to say that Hezbollah lacked a unity of effort derived from intellectual purpose. Hezbollah's 13 principles were new to the organization and a result of many years of fighting with the Israeli's. The principles represented a new mindset amongst the normally slow to react Arab enemies that Israel had faced in the past. They facilitated three differences that made Hezbollah stand out compared to other insurgent actors in the region. These differences were Hezbollah's ability to maneuver tactically against the IDF, the autonomy given to its small units, and the initiative taken by the small unit leaders.[149]

Even if the 13 principles were new to Hezbollah, and had derived as the result of an evolutionary process within the organization, insurgents already knew the basics from the past. However, the adoption of these principles, this "doctrine," did upset Israeli units that had not foreseen and therefore had not trained for, as the type of warfare that might

[148]North Atlantic Treaty Organization.

[149]Exum, 13.

occur. In this sense, it could be argued that the shift in Hezbollah doctrine has similarities with what would be considered RMA.

An emerging trend in modern conflicts is the significance of the cognitive and moral domains, whoever gets his or hers message out to the public will have the advantage. Hezbollah's choice to stand and fight could also be a result of this understanding. This use of information operations for operational and strategic effect with today's mass media and Internet provides a new level of operational reach.[150] In an early study of the war, one expert was quoted as saying, "the Israelis intended to empty and isolate the south in order to prosecute a ground war against Hizb'Allah combatants; but the first casualty of war is the old and the sick and the poor. Nasrallah knows this, he used it, he exploited it, and Israel walked right into it. Did he mobilize Hizb'Allah to get these people to safety? Of course not-he used them, and to great effect."[151] The ability to exploit perceived atrocities committed by the IDF was a source of power for Hezbollah.

So in short, the ability to defeat an adversary in the cognitive and moral domains is a vital key to success in counterinsurgency, but it also has strong potential to be the key for other forms of war such as hybrid war.[152] This could be an RMA factor of hybrid warfare, the understanding that actions do not have to defeat an enemy physically, only psychologically and act accordingly.

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[150]Carron, 6.

[151]Cordesman, 30.

[152]Carron, 6.

## Technology

No single weapons system used by the Hezbollah was new in the sense that this was the first time they saw combat action. Neither was there any alteration to existing systems that made them "new" by adding capabilities they did not have previously. The novelty of the technology used by Hezbollah was the fact that Hezbollah had never used it before. Israeli armor units expecting to meet by RPG-7's and the occasional AT-3 SAGGER were suddenly finding themselves under a barrage of modern anti-armor weapons. Handheld weapons such as the RPG-29 capable of penetrating the front of even the latest Israeli tanks shattered the relative safety of MBTs. New laser guided missiles with thermal imaging sight units, with equally impressive penetration power but with standoff distances of several miles, added to the destruction of Israeli tanks. Coupled with low-tech weapons such as improvised explosive devices this barrage proved devastating. However, Israeli armor losses were not the result of new innovative technology but simply the result of the failure of Israeli Intelligence to accurately predict the enemy's arsenal and capabilities.

Another example of known technology having a devastating effect was the attack by an anti-ship missile on one of Israel's warships patrolling offshore of Lebanon. According to investigations after the war, the ship's crew through poor intelligence failed to recognize the presence of such a threat.[153] In fact, no one had bothered to activate the missile defense system that equipped the ship. The technology used in the attack was not new, the ship was equipped to deal with this type of threat, and it was simply a matter of

[153]Hanan Greenberg, "Report: Ship Crew Didn't Realize Missile Threat," *Ynet news*, 11 July 2006, http://www.ynetnews.com/articles/0,7340,L-3325146,00.html (accessed 18 November 2012).

failing to recognize that the enemy had acquired this technology. The hybrid nature of Hezbollah resulted from access to technology previously being the prerogative of a nation state, and Israel's failure to recognize this and accurately prepare for it.

In this sense, the hybrid nature of the 2006 war did not result from use of new technology and thus not be the result of a RMA. The mix of well-known insurgency tactics and new weapons systems is more interesting from a hybrid and RMA perspective. Is this a new form of warfare, resulting from a deliberate effort to offset the advantages that states like Israel enjoys when fighting insurgents? Alternatively, is it simply a natural evolution of warfare that was bound to take place eventually? This borders the concept of RMA as new technology offsets major powers advantages; however, the new technology used in the war by Hezbollah was only new to the area and not to warfare.

As far as Hezbollah's use of old, well-known technology, Israel never managed to stop Hezbollah's ability to transmit its own discourse through television images throughout the war. This was not for lack of trying but rather the result of Hezbollah tying one of its main efforts into civilian assets to deny Israel the chance to attack it. By using commercial satellites, Hezbollah maintained its broadcasts and Israel was not able to counter or disrupt the signals.[154] This would be a good example of how new use of old technology upsets a major powers advantage and allows a minor actor to influence a wider audience, in essence a hybrid response.

[154]Barbara Opall-Rome, "Inability to Jam Hezbollah Satellite TV Signal Spurs Israeli Research," *Space News*, 29 August, 2006, http://www.spacenews.com/article/inability-jam-hezbollah-satellite-tv-signal-spurs-israeli-research#.UK5bLmez7XU (accessed 22 November 2012).

For all its capabilities, Hezbollah paid a high price in C2. The type of distributed C2 with freedom of action suited the organization's prepared defense against a known enemy. Fighting in familiar terrain with limited tasks, the need for a close C2 to coordinate fighting was not predominant. Should Hezbollah fight outside its "comfort-zone" it is questionable if they would have been able to fight the same hybrid war without a higher proportion of coordination.

# CHAPTER 5

## CONCLUSIONS AND RECOMMENDATIONS

> The first, supreme, the most far-reaching act of judgment that the statesman and commander have to make is to establish by that test the kind of war on which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature.
>
> — Carl von Clausewitz, *On War*

This thesis has addressed hybrid warfare to try to determine whether hybrid warfare is the result of a Military Revolution or a Revolution in Military Affairs, or neither of these. In doing so, it is the hope that by contributing to the definition of a new concept it will be easier to understand its implications. In the Lebanon War of 2006, Israel faced a new type of enemy, an enemy capable of waging hybrid war. The result was akin to a draw, a very disappointing outcome for what arguably is the most powerful fighting force in the region, the IDF. Hezbollah's success was a result of its capability to negate Israeli strengths by waging hybrid war. By waging hybrid war, many of the advantages enjoyed by the state, Israel in this case, did not result in expected gains on the battlefield.

This thesis has not set out to determine the right way to defeat an enemy capable of waging hybrid warfare. Nor has it indeed tried to determine if there even is a phenomenon on today's battlefield worthy to be labeled hybrid warfare. Settling the debate whether hybrid warfare is in need of a label of its own or if it is just an evolution of asymmetric or irregular warfare is still necessary. This thesis however has acknowledged hybrid warfare in order to look for what could be its source. In doing so, this thesis had to look beyond the ongoing debate and instead look at hybrid warfare as

explained by its many proponents. By determining the factors that can be said to constitute hybrid warfare, it was possible to compare them to Knox and Murray's concepts of Military Revolution and Revolution in Military Affairs to decide if these had any influence on the evolvement of hybrid warfare.

## Hybrid Warfare and Military Revolution

As evident by the literature review and the case study finding evidence of hybrid warfare being a result of a MR is very hard. Concerning society, Hezbollah is a result of the ongoing conflict between different insurgent and terrorist groups and Israel, which has its roots in the Lebanese Civil War. Hezbollah as an organization first came about in the violent areas of southern Lebanon in the 1980s and the society in which it first saw light has changed little in the past 30 years. It is therefore hard to claim that any major societal changes should have caused Hezbollah to achieve the results it did against Israel in the 2006 war simply because of the situation which created the organization still exists. If the situation had changed, a lot of the foundation and driving force of the organization would have been gone and arguably, the organization would have suffered from it in terms of local support.

Hezbollah's governance also did not undergo a major change in the years leading up to the war. The organization has been a typical hierarchical organization that for security reasons has been highly compartmentalized. No changes in the leadership or governance of Hezbollah are the result of a MR. Although Hezbollah leadership did adjust; it was more of an adjustment to Israeli actions and the result of a natural evolution than a revolution. The fact that Hezbollah was in essence a state within the state did contribute to the organization's capability to wage hybrid war. However, Hezbollah still

lacks all the tools and capabilities available to a nation state. By not controlling the complete resources of a state, it is harder to create change in way that would constitute a MR.A major strength of Hezbollah has been its capacity to recruit and train scores of young Shia Muslims through the years. This training, bolstered by alleged assistance from Syria and Iran, has been particularly important in order for Hezbollah to make the most use possible of modern weapons systems, such as guided missiles. Hezbollah's cynical use of the suffering of its own population was also important for recruiting during the war. Using the suffering of one's own civilian population in propaganda efforts is not new to war. What is a change is Hezbollah's purposeful exposure of the civilian population to Israeli retaliation by using launching missiles and rockets from civilian areas and structures. However, the case study has not come up with any major change in the doctrine for recruiting or training new fighters. It is therefore not possible to claim that any change in this area should be the result of a MR.

## Hybrid Warfare and Revolution in Military Affairs

Hezbollah's tactics in the 2006 Lebanon War upset Israeli forces. The proximity of the fighting, close to protected civilian infrastructure such as religious structures, hospitals, and schools certainly prohibited unlimited use of power by the Israelis. This way of negating an opponent's, Israel, advantages by tactical adaptability is compatible with the concept of hybrid warfare. It is, however not new to warfare and thus not the result of a RMA. Rather it is the natural asymmetric response by a weaker opponent as seen previously seen in, as an example, Vietnam. For the weaker opponent any tactics that negate the firepower of a stronger force is desirable, be that by operating so close to

your opponent that he cannot use his firepower without risking his own troops, or by moving in and about civilians.

When adopting its 13 principles Hezbollah showed an understanding of its own capabilities, but perhaps more interesting a remarkable understanding of Israeli weaknesses. Hezbollah tailored the 13 principles to fight a conflict on its own terms, making sure that any wrongdoing or infringements on human rights would look like the result of Israeli action. This was a good example of the hybrid nature of Hezbollah, its action in one domain, and the inevitable Israeli response, had its greatest impact in another domain. Was this a result of a Revolution in Military Affairs? The study has shown that although some similarities between Hezbollah tactics, and what constitutes a RMA, they are too few and too small to be the result of a RMA. For example, the 13 principles, or doctrine if you will, of Hezbollah owes a lot to previous irregular warfare theories and teachings of guerilla fighters.

What upset Israel the most in the war, was the capabilities of Hezbollah to withstand the onslaught of a modern armed force capable of precision strikes at will. This capability was in part the result of new modern weaponry in the hands of Hezbollah. By augmenting its skills in small unit tactics, with the lethality of modern missile systems capable of dealing with threats on land, sea, and air Hezbollah upset the balance of power. This is typical for a RMA, the introduction of new weapon systems that changes the balance of power or negates the advantage enjoyed by one side in previous conflicts. This is perhaps as close as hybrid warfare comes to being a result of a RMA, it is however not enough. None of the weapon systems used by Hezbollah was new to warfare, only new in the sense that Hezbollah had not fielded them previously. There is a

direct link between some of the spectacular success of Hezbollah and negligence or ignorance on the Israeli side. An example was the crippling of an Israeli Navy caused by the failure on the Israelis part to identify that Hezbollah had this capability. Although the ship was equipped with warning systems and close in weapon systems, no one activated them.

The massive use of television and the Internet as a means of fighting Israel in the cognitive domain is a good example of the hybrid nature of Hezbollah's fight. What differs from the media's role in previous conflicts and wars is Hezbollah's willingness to expose its own civilian population to extreme danger, by purposefully fighting amongst them in order to cause collateral damage. This is probably as close as the case study comes to showing the link between a RMA and hybrid war. However, it is a weak link, considering that media and propaganda has been an integral part of warfare for many decades. The use of media in itself is nothing new, but Hezbollah's cynicism is unrivaled in the past.

## Conclusion and Recommendations

Hybrid warfare as waged by Hezbollah in 2006 has no similarities with Military Revolutions. It is not a product of a MR, nor has it spawned one. Certain aspects of hybrid warfare do show similarities with RMA as described by Murray and Knox. The similarities are however small and not significant enough to claim that hybrid war should be the result of a RMA. In conclusion, this thesis has shown that hybrid warfare as described in today's discourse is not the result of a Military Revolution, neither is it the result of a Revolution in Military Affairs. As an abstract phenomenon, it is something else.

This thesis set forth to answer the question; what is hybrid warfare: a revolution in military affairs, a military revolution, or something else? The conclusion is that hybrid warfare is something else. To define this something else has not been the purpose of the thesis, and it is therefore a recommendation that future studies should try to determine the roots of hybrid warfare, by using additional case studies.

The ongoing conflict between Hamas and Israel is a hybrid conflict that could benefit from the same type of research as presented in this thesis, to aid in defining what hybrid warfare is. Chinese Government and Military sources also address hybrid war as a possible response to the U.S. superior military power. Research addressing this perspective would help define hybrid warfare, when waged by a nation state as opposed to an insurgency or terrorist group.

Another area of research that this study has not dealt with is the influence of the particular terrain in southern Lebanon. A possible area of future research is whether hybrid warfare could exist in all types of environment, or if specific physical "standards" such as urban terrain or canalizing terrain has to be present. Of course, many scholars still question the validity of the term hybrid warfare itself, so whether this concept is valid could also be subject for further studies.

Finally, it is obvious that the term hybrid warfare is highly contested and that the subject would benefit from further studies. This means that another area for further studies is to determine in greater detail what entails hybrid warfare, what makes an enemy capable of fighting in a hybrid way, and most important how do we fight a hybrid enemy or threat.

## Reflection

In the process of this work the author of this thesis have struggled with whether there is validity to the term hybrid warfare. Certainly, there are scholars that will argue that the phenomenon of hybrid warfare is nothing but guerilla war, compound war, insurgency, or any other type of asymmetric war. Hybrid war according to some is simply the above waged with modern weapons, in a setting that through information technology has the capability to reach a wider "audience." Then again, using the same argument it is possible to describe armored warfare as being the same as cavalry warfare. However, just because armor tactics have their roots in cavalry tactics, I believe it would be hard to find anyone who would argue that by virtue of its roots and their similarities, armor warfare and cavalry tactics are the one and same.

Perhaps hybrid warfare is not as much the result of innovative uses of tactics and weapons, as it is the result of a thorough understanding of one's enemy's weaknesses. A failure by any armed force to identify its own vulnerability's while the enemy clearly sees them will cause a "shock" to its own forces as they struggle to grasp and deal with an environment they have not fully prepared for. Not seeing one's own weakness and not understanding the opponent's capabilities to exploit them, could lead to a sense of frustration or inadequacy to understand what is going on. When facing a challenge on the battlefield it is natural to look at both one's own organization and the enemy. It is sometimes easier to blame defeat on use of innovative technology or tactics by the enemy than recognizing failure in one's own forces.

The case study did not reveal any information to support the presence of a MR as responsible for Hezbollah's hybrid capabilities. Concerning a possible RMA, there are

elements of the 2006 war that show similar criteria that you would expect from a RMA. However, they are not significant enough to qualify as a RMA. Could it be that the hybrid nature of the war was really Hezbollah's ability to fight Israel on a cognitive and moral domain?

Hezbollah's thirteen principles were used to great effect by the organization. As they resemble previous writings on how to wage a guerilla campaign, it could be interesting to examine how Hezbollah came up with the principles. If the principles are a result of lessons learned by Hezbollah themselves without external influence, this could be an indication that there are certain principles that are universal and transcend time and space. If on the other hand they Hezbollah copied them from previous wars and campaigns this would likely mean that hybrid war as waged by Hezbollah is a natural evolution of irregular warfare further strengthening the conclusion of this thesis.

Another challenge when defining hybrid warfare lies in the fact that by defining a concept, or accrediting an organization of being this type of enemy or that type of enemy, we might actually obscure the true nature of its capabilities. By trying to put a label to a phenomena or concept, we unwittingly describe it as either or, when the very term hybrid could mean both. Put in other words, if an enemy is truly hybrid any attempt on classification of said enemy as either regular or irregular could obscure his true nature as a hybrid force.

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