

REPORT DOCUMENTATION PAGE					<i>Form Approved</i> OMB No. 0704-0188	
<p>The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p> <p>PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.</p>						
1. REPORT DATE (DD-MM-YYYY) 04/04/2016		2. REPORT TYPE Master's Thesis			3. DATES COVERED (From - To) 20-07-2015 to 4-4-2016	
4. TITLE AND SUBTITLE Using Center of Gravity Analysis to Defeat Violent Extremist Organizations				5a. CONTRACT NUMBER		
				5b. GRANT NUMBER		
				5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S) Lawrence P. Wood Lieutenant Colonel, United States Air Force Reserve				5d. PROJECT NUMBER		
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Joint Forces Staff College Joint Advanced Warfighting School 7800 Hampton Blvd. Norfolk, Virginia 23511-1702					8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)					10. SPONSOR/MONITOR'S ACRONYM(S)	
					11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution is unlimited.						
13. SUPPLEMENTARY NOTES						
14. ABSTRACT Attacking a VEOs Center of Gravity (COG) is key to defeating it. Joe Strange's theory looks at an enemy's COG through its primary abilities which merit it to exist as such. This thesis uses two significant historical case studies to demonstrate Strange's theory retroactively in the defeat of the Medellin and Cali drug cartels and the Liberation Tigers of Tamil Eelam (LTTE), and then uses that analysis to develop a strategy to defeat the Islamic State of Iraq and Syria (ISIS). Analysis of the case studies shows several critical vulnerabilities exist within ISIS that are ripe for exploitation using specific instruments of power. This thesis demonstrates the viability of using Strange's Center of Gravity analysis method to defeat ISIS.						
15. SUBJECT TERMS Violent Extremist Organization, VEO, Center of Gravity, Liberation Tigers of Tamil Eelam, LTTE, Medellin Cartel, Cali Cartel, Islamic State of Iraq and Syria, ISIS						
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON	
a. REPORT	b. ABSTRACT	c. THIS PAGE			19b. TELEPHONE NUMBER (Include area code)	
Unclass	Unclass	Unclass	UU	51	757-443-6301	

NATIONAL DEFENSE UNIVERSITY

JOINT FORCES STAFF COLLEGE

JOINT ADVANCED WARFIGHTING SCHOOL



Using Center of Gravity Analysis to Defeat Violent Extremist Organizations

by

Larry Wood

Lieutenant Colonel, United States Air Force Reserve

Intentionally left blank

Using Center of Gravity Analysis to Defeat Violent Extremist Organizations

by Larry Wood

Lieutenant Colonel, United States Air Force Reserve

A paper submitted to the Faculty of the Joint Advanced Warfighting School in partial satisfaction of the requirements of a Master of Science Degree in Joint Campaign Planning and Strategy. The contents of this paper reflect my own personal views and are not necessarily endorsed by the Joint Forces Staff College or the Department of Defense.

This paper is entirely my own work except as documented in footnotes. (or appropriate statement per the Academic Integrity Policy)

Signature: _____



Date: April 4, 2016

Thesis Advisor:

Signature: _____


Dr. Gregory Miller

Approved by:

Signature: _____


Mr. Michael Bennett
Committee Member

Signature: _____


Peter Yeager, Col, USMC
Director, Joint Advanced Warfighting School

Intentionally left blank

ABSTRACT

The National Security Strategy of 2015 establishes the importance of defeating Violent Extremist Organizations (VEOs). Attacking a VEOs Center of Gravity (COG) is key to defeating it. As traditionally conceived by Clausewitz, an enemy's COG is usually its army. However, the ability to generate a physical force is, in the case of certain VEOs, not its sole source of power. The primary source of their power and resistance could be moral and/or ideological. Joe Strange's theory looks at an enemy's COG through its primary abilities which merit it to exist as such. These primary abilities are called critical capabilities (CCs). For a fully operational CC to exist, it needs essential conditions, resources, and means which Strange identifies as critical requirements (CRs). Once the CCs and CRs are identified, the next step is to surmise which CRs are deficient or vulnerable to neutralization, interdiction, or attack in a decisive manner, critical vulnerabilities (CVs). This thesis uses two significant historical case studies to demonstrate Strange's theory retroactively in the defeat of the Medellin and Cali drug cartels and the Liberation Tigers of Tamil Eelam (LTTE), and then uses that analysis to develop a strategy to defeat the Islamic State of Iraq and Syria (ISIS). Analysis of the case studies shows several critical vulnerabilities exist within ISIS that are ripe for exploitation using specific instruments of power. This thesis demonstrates the viability of using Strange's Center of Gravity analysis method to achieve the desired objective of defeating ISIS. Currently, however, hegemonic and regional powers are engaged in uncoordinated and often conflicting operations against ISIS. Prior to being able to apply Strange's theory, the competing interests in the region must set aside their strategic and ideological differences and coalesce into a cohesive body with agreed upon goals.

Intentionally left blank

DEDICATION

This thesis is dedicated to Firefighter Gerry Nevins, FDNY, and Police Officer Jerome M.P. Dominguez, NYPD, who selflessly sacrificed their own lives on September 11, 2001, so that others may live.

Intentionally left blank

ACKNOWLEDGEMENTS

I would like to acknowledge the following people for their support with this thesis. To my fellow New York State Troopers Marty Campos, Darren Daughtry, Jim Maxwell, and Rob Wright for our brainstorming session before I started putting words to paper, and to Bob Kotin for his feedback. I would like to express my gratitude to Colonel Erik Rundquist, USAF, and Colonel Brent French, USAFR, for their help getting me into JAWS, for proofreading this thesis, and their continuous support of my military career. My appreciation of Lieutenant Colonel Jeff Kersey's, USA, and Major Tim Dwyre's, RCAF, time spent proofreading my drafts and providing valuable insight. I would like to acknowledge my indebtedness to Lieutenant Colonel Mike Reilly, USMC, for his guidance and help in understanding the different Center of Gravity concepts. Librarian Jeannemarie Spurlin deserves recognition for the invaluable research assistance she provided me. I credit Doctor Bryon Greenwald for providing me a strong foundation that directly lead to my selection as a STRATCOM Scholar. I appreciated Doctor Greg Miller's patience and assistance with the project. Finally, Jeff Turner spent a significant amount of time helping me improve my writing abilities, convincing me to apply for the STRATCOM Scholar program, and for pushing me to achieve a high quality thesis.

Intentionally left blank

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION/DEFINITIONS & METHODS	1
Definitions.....	3
Methods.....	4
CHAPTER TWO: COMPARING CENTER OF GRAVITY APPROACHES	6
CHAPTER THREE: THE LIBERATION TIGERS OF TAMIL EELAM	12
Analysis.....	15
Summary	19
CHAPTER FOUR: THE MEDELLIN & CALI CARTELS	21
Analysis.....	22
Summary	26
CHAPTER FIVE: THE ISLAMIC STATE.....	28
Center of Gravity Analysis	31
Summary	40
CHAPTER SIX: FINDINGS AND RECOMMENDATIONS	41
APPENDIX A: ISIS CENTERS OF GRAVITY	46
BIBLIOGRAPHY	47
VITA	51

Intentionally left blank

CHAPTER ONE: INTRODUCTION/DEFINITIONS & METHODS

The 2015 National Security Strategy (NSS) characterizes violent extremism as one of the challenges to the national security of the United States, and requires the nation to counter the ideology of Violent Extremist Organizations (VEOs) with “increased efforts to prevent the growth of violent extremism and radicalization that drives increased threats.”¹ However, the NSS does not offer specific approaches and the U.S. currently maintains less influence in the parts of the world most susceptible to VEO inculcation. While the ultimate goal of the United States is to degrade and defeat VEOs,² decreased American influence, coupled with a reduction of resources, makes it improbable the task will be accomplished in the next five to ten years.³ To address the root cause of a VEO’s popularity and ability to recruit, the area of operations (AO) must be secured to allow non-government organizations (NGOs), government organizations (GOs), and private businesses to aid in the recovery process of a region formerly subjected to VEO rule. For instance, immediately following the end of hostilities with the Liberation Tigers of Tamil Eelam (LTTE), United Nations observers, Sri Lankan GOs, and NGOs flowed into the war torn area to help the suffering Tamil population.

In the current political climate in Washington, D.C., there is limited appetite on the part of the President to place American troops into direct ground combat roles. In a statement to the nation on September 10, 2014, President Obama insisted American forces in Iraq will not have a combat mission and the United States will not get dragged

¹ President Barack Obama, *National Security Strategy* (Washington DC: Government Printing Office, January 2015), 9.

² *Ibid.*, 10.

³ U.S. Department of Defense, *Quadrennial Defense Review 2014* (Washington, DC: Government Printing Office, March 2014), 27.

into another ground war.⁴ Even after the horrific attacks carried out by a VEO in Paris on November 13, 2015, resulted in 130 civilians killed and hundreds more wounded, President Obama reiterated the United States will not commit U.S. forces to engage in ground combat in Iraq or Syria.⁵

The most direct means available to attack and defeat VEOs is the military instrument of power (IOP). The current United States strategy of by, with, and through is similar to the early phase of OPERATION ENDURING FREEDOM (OEF), where American Special Operations Forces, supported by airpower, worked with local forces to overthrow the Taliban. This operation provides a potential template for short term disruption and degradation of VEOs using military force. In the long term, however, key Taliban and al-Qaeda leaders (including Usama bin Laden) escaped from the area into Pakistan and established sanctuaries in the Khyber-Paktunkhwa Province and the Federally Administered Tribal Areas where they can launch attacks into Afghanistan. The criticisms of OEF could be mitigated by a more holistic approach as detailed in this thesis. And because an ideology cannot be completely defeated with military force alone, or may be intensified by the use of military force, defeating VEOs in a limited war scenario requires the simultaneous application of several instruments of power (IOPs).

The United States government continues to search for competent strategies in its efforts to defeat VEOs. The problem is no two VEOs are the same, and there are only a few examples of VEOs being effectively defeated by actors of the state, vice internal

⁴ Statement by the President on ISIL/whitehouse.gov September 10, 2015, p 4
<https://www.whitehouse.gov/the-press-office/2014/09/10/statement-president-isil-1> (Accessed October 17, 2015.)

⁵ Press Conference with the President in Antalya, Turkey, November 16, 2015, p 2
<https://www.whitehouse.gov/the-press-office/2015/11/16/press-conference-president-obama-antalya-turkey> (Accessed November 18, 2015.)

dissolution.⁶ All of America's IOPs, diplomatic, informational, military, economic, financial, intelligence, and law enforcement (DIMEFIL) are valuable tools to attack the identified critical vulnerabilities of a VEO to defeat it. Using Joe Strange's Center of Gravity (COG) theory⁷ in innovative ways allows the formulation of a strategy to defeat VEOs utilizing all IOPs with limited military involvement.

Definitions

The definitions departments and agencies across the U.S. government use for violent extremism, terrorism, and transnational organized crime are imbricated in many ways. The U.S. Department of Homeland Security defines violent extremists as, "individuals who support or commit ideologically motivated violence to further political goals."⁸ Joint Publication 3-26 describes terrorism as, "the unlawful use of violence or threat of violence, often motivated by religious, political or other ideological beliefs, to instill fear and coerce governments or societies in pursuit of goals that are usually politicized."⁹ The Federal Bureau of Investigation (FBI) defines terrorism as "the unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives."¹⁰ The National Security Council defines transnational organized crime as "self-perpetuating associations of individuals who operate transnationally for the

⁶ Dr. Gregory Miller "Violence and the Political State," (lecture, Joint Forces Staff College, November 19, 2015).

⁷ Joe Strange, *Centers of Gravity and Critical Vulnerabilities: Building on the Clausewitzian Foundation So That We Can All Speak the Same Language* (Quantico, VA: Marine Corps University Foundation, 1996), 12.

⁸ U.S. Department of Homeland Security <http://www.dhs.gov/topic/countering-violent-extremism> (Accessed February 12, 2016.)

⁹ U.S. Department of Defense, *Counterterrorism*, Joint Publication 3-26 (Washington, DC, 2014).

¹⁰ U.S. National Institute of Justice <http://www.nij.gov/topics/crime/terrorism/pages/welcome.aspx> (Accessed February 6, 2016.)

purpose of obtaining power, influence, monetary and/or commercial gains, wholly or in part by illegal means, while protecting their activities through a pattern of corruption and/or violence, or while protecting their illegal activities through a transnational organizational structure and the exploitation of transnational commerce or communication mechanisms.”¹¹ These associations of individuals are known as Transnational Criminal Organizations (TCOs). While the definitions of violent extremists, terrorists, and transnational criminals have many similarities, TCOs lack political objectives in their pursuits. Ultimately, for the purposes of this analysis, a Violent Extremist Organization VEO is defined as *a group of individuals who commit or intend to commit violent acts in an effort to further their ideological and/or political objectives.*

Methods

This thesis examines the decisive defeat of a well-known VEO, the Liberation Tigers of Tamil Eelam by the government of Sri Lanka,¹² and successful defeat and dismantling of two Transnational Criminal Organizations (TCOs), the Medellin and Cali drug cartels, by the Columbian and American governments.¹³ Joe Strange's Center of Gravity model is then applied retroactively to identify the critical capabilities and critical requirements that allowed these organizations to exist, as well as the critical vulnerabilities that states exploited to defeat them. Finally, the most infamous VEO in the

¹¹ National Security Council <https://www.whitehouse.gov/administration/eop/nsc/transnational-crime/definition> (Accessed March 30, 2016.)

¹² Ahmed S. Hashim, *When Counterinsurgency Wins: Sri Lanka's Defeat of the Tamil Tigers* (Philadelphia, PA: University of Pennsylvania Press, 2013), 1. Eelam refers to the name of the proposed autonomous Tamil state.

¹³ Randy Willoughby, "Crouching Fox, Hidden Eagle: Drug Trafficking and Transnational Security - A Perspective from the Tijuana – San Diego Border." *Crime, Law, and Social Change*, Vol 40, No. 1 (July 2003): 116.

last several years, the Islamic State of Iraq and Syria (ISIS)¹⁴ is analyzed to identify its CCs, CRs, and CVs so a strategy can be developed to defeat it.

Although these three case studies contain similarities, there are also significant differences between the organization's aims. The Medellin and Cali drug cartels were TCOs that attempted to turn Columbia into a Narco-State to improve their businesses of smuggling drugs out of the country and make more money. The LTTE was an insurgency that desired an autonomous region in Sri Lanka, free from Sinhalese rule, and outside interference. Finally, ISIS proclaims itself to be a new Islamic caliphate professing an End Times eschatology. Strange's methodology is applicable in all of these cases as they are all organized militant groups engaged in war like activities. It is also applicable because enough similarities exist between the groups to allow for conclusions. All of the groups examined showed a ruthlessness in pursuit of their objectives and displayed a willingness to use violence to attain those objectives. The LTTE mainstreamed the use of suicide bombers¹⁵ and ISIS adopted the use of suicide bombing as well as other barbaric practices such as filming the decapitation of captives.¹⁶ Although the Cali and Medellin cartels did not resort to using suicide bombers, they were responsible for hundreds of bombings carried out in Columbia during the 1980's and 1990s.¹⁷ Both the LTTE and ISIS gained control of an autonomous region, enabling self-governance and enforcement of their own Rule of Law.

¹⁴ ISIS is also known as the Islamic State, the Islamic State of Iraq and al-Sham, the Islamic State of Iraq and the Levant, and Daesh.

¹⁵ Niel Smith, "Understanding Sri Lanka's Defeat of the Tamil Tigers," *Joint Forces Quarterly*, Issue 59, 4th Quarter (December 2010): 41.

¹⁶ Yonah Alexander and Dean Alexander, *The Islamic State: Combating the Caliphate Without Borders* (Lanham, MD: Lexington Books, 2015), 50.

¹⁷ Ron Chepesiuk, *Drug Lords: The Rise and Fall of the Cali Cartel* (Preston, UK: Milo Books Ltd., 2003), 140.

CHAPTER TWO: COMPARING CENTER OF GRAVITY APPROACHES

Carl von Clausewitz defines Center of Gravity as “the hub of all power and movement, on which everything depends.”¹ As traditionally conceived by Clausewitz, an enemy’s strategic COG is usually its army.² Joe Strange builds upon Clausewitz’s definition and theorizes that by identifying an enemy’s Center of Gravity, which he describes as “the primary sources of moral or physical strength, power and resistance,”³ it is then possible to identify its critical capabilities (CCs). Strange describes CCs as “primary abilities which merits a Center of Gravity to be identified as such in the context of a given scenario, situation, or mission.”⁴ In the case of certain VEOs, the primary sources of their power and resistance could be moral and/or ideological. For a fully operational critical capability to exist, it needs “essential conditions, resources, and means”⁵ identified by Strange as critical requirements (CRs).

Once the CCs and CRs are identified, the next step is to surmise which CRs are “deficient or vulnerable to neutralization, interdiction, or attack (moral/physical harm) in a manner achieving decisive results.”⁶ Identifying and exploiting these CVs, is the key to degrading and defeating a VEO. For instance, at the operational level a VEO’s COG may be its military force as Clausewitz contends. The ability to seize and hold terrain may be a CC warranting the COG’s identification as such. One CR enabling this capability would be a competent fighting force equipped with weapons, explosives, and training. A

¹ Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (New York: Alfred A. Knopf, 1993), 720.

² Ibid.

³ Joe Strange, *Centers of Gravity and Critical Vulnerabilities: Building on the Clausewitzian Foundation So That We Can All Speak the Same Language* (Quantico, VA: Marine Corps University Foundation, 1996), 12.

⁴ Ibid., 43.

⁵ Ibid.

⁶ Ibid., 3.

military application of Strange's theory includes attacking the VEO's supply chain—a potential CV, but an alternative application of IOPs suggests disrupting its funding source would have the same or greater effect because it may not increase their resolve. Strange's theory advocates an indirect approach to attacking an enemy's COG, as opposed to Clausewitz's direct approach.

Numerous military theorists and commanders attempt to implement Clausewitz's vision of the Center of Gravity concept. Over time, as the conduct of warfare evolved, these theorists and commanders developed their own interpretations of what his concept entails. Joint Publication 5-0, defines a COG as “a source of power that provides moral or physical strength, freedom of action, or will to act.”⁷ JP 5-0 recognizes the different levels of a COG to include the strategic and operational levels.⁸ Although, codified in U.S. doctrine, not everyone agrees with the above definitions of a COG.

Colonel Dale C. Eikmeier, USA, (Ret), a proponent of Strange's theory, describes military students attempting to define the concept of COG as “blind men attempting to describe an elephant. They know a definition exists, but they describe it according to their own experiences.”⁹ Eikmeier notes “Centers of Gravity are not self-sufficient. They require input to produce capabilities or force.”¹⁰ This supports Strange's theory of CCs being “primary abilities that merit a center of gravity to be identified as such.”¹¹ Eikmeier also identifies the importance of CRs and the role they play in a COG operating effectively. He recognizes that without CRs, a COG “will cease being a source of power

⁷ U.S. Joint Chiefs of Staff, *Joint Planning*, Joint Publication 5-0 (Washington, DC: Joint Chiefs of Staff, August 11, 2011), III-22.

⁸ Joint Planning 5-0, III-22

⁹ Dale C. Eikmeier, “Center of Gravity Analysis,” *Military Review* (July – August 2004): 2.

¹⁰ *Ibid.*, 3.

¹¹ Joe Strange, 43.

that generates the critical capability.”¹² Eikmeier also recognizes the importance of CVs and recognizes they produce excellent targets as well as things to defend.¹³ However, Eikmeier diverges from Strange’s theory, as he believes only the military and economic IOPs are relevant to attacking a COG at the strategic level.¹⁴ He discounts the importance of the diplomatic and information IOPs, such as “the oft cited will of the people.”¹⁵ In limited wars, which are the types normally waged against VEOs, he believes the strategic COG “is almost always a military/security capability.”¹⁶ Eikmeier’s approach of disregarding the other instruments of power in attacking strategic COGs, unnecessarily limits a nation’s full range of options in its attempts to defeat a VEO. This thesis advocates applying all of a nation’s IOPs on an enemies’ COG to bring about decisive results.

Milan Vego is convinced a mistranslation of the German word *Schwerpunkt* found in Clausewitz’s book, *On War*, caused modern military theorists to misconstrue the COG concept. Instead of referring to the “hub of all power and movement, on which everything depends,”¹⁷ the correct translation of *Schwerpunkt* according to Vego is “weight (or focus) of effort.”¹⁸ Vego believes this concept equates more closely to the U.S. doctrinal terms of *sector of main effort* and the *point of main attack*.¹⁹ Vego asserts

¹² Dale Eikmeier, 3.

¹³ Ibid.

¹⁴ Ibid., 4.

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Carl von Clausewitz, *On War*, 720.

¹⁸ Milan Vego, “Clausewitz’s Schwerpunkt: Mistranslating from German – Misunderstood in English,” *Military Review*, (January – February 2007): 101.

¹⁹ Ibid.

Schwerpunkt, with few exceptions, applies only to the strategic level of war, as opposed to Strange's Center of Gravity theory that is applicable to all levels of war.²⁰

According to Vego, *Schwerpunkt* evolved within German military doctrine over time as a result of arduous debate among theoreticians. The traditional Clausewitzian definition held that neutralization or destruction of an enemies' military forces was the quickest means to victory. However, in the nineteenth century, German and Austrian military theorists posited that a nation's capital constituted a *Schwerpunkt*.²¹ The concept evolved further under Field Marshal Alfred von Schlieffen who believed the advent of mass armies, coupled with advanced weaponry capable of greater lethality, would lead to a stalemate if an enemies' *Schwerpunkt* could not be exploited. Schlieffen's answer to this new way of war was to deploy German forces in a timely manner, in depth, at a decisive point.²² Although the concept did not unfold as planned during World War I, it proved highly successful during Germany's initial Blitzkrieg campaigns that opened World War II.

There are similarities between the German concept of *Schwerpunkt* and *sector of main effort* and *point of main attack*. However, Vego contends that the German model is more erudite and differs significantly from a Center of Gravity concept.²³ He also recognizes the concept is inadequate in achieving theater strategic objectives through the use of any IOP, other than the military.²⁴ It is difficult to envision Vego's theory being

²⁰ Vego, 101.

²¹ Ibid., 102.

²² Ibid.

²³ Ibid., 108 – 109.

²⁴ Ibid., 109.

effective as a model to defeat VEOs when factoring in his belief that *Schwerpunkt* applies only to the strategic level of war.

Colonel Antulio J. Echevarria II, USA, (Ret), completely disagrees with Strange's Center of Gravity theory. Echevarria believes that "in the Clausewitzian sense, COGs are neither strengths nor vulnerabilities per se but focal points where certain forces come together."²⁵ He does believe striking a COG can "compromise a strength" or "exploit a weakness."²⁶ However, he thinks the key to finding a COG is locating points "where sufficient connectivity exists among the various parts of the enemy to form an overarching system (or structure) that acts with a substantial degree of unity, like a physical body."²⁷ Next he theorizes a COG provides a "certain *centripetal* or center seeking force."²⁸ This force acts to retain the system together, and striking it could throw the system off balance. Echevarria identifies three criteria as key to determining an enemy's COG: 1) Is identifying and attacking a COG appropriate for the level of war being waged? 2) Is the enemy structure sufficiently connected to be treated as a single body? 3) Is there one element possessing enough centripetal force to hold the system together?²⁹

Echevarria believes Strange's theory based on a "capabilities based definition" differs from his interpretation of Clausewitz's concept, which is "effects based."³⁰ Echevarria argues Strange's theory is flawed because "any number of dynamic agents of

²⁵ Antulio J. Echevarria II, "'Reining in' the Center of Gravity Concept," *Air and Space Power Journal* (Summer 2003): 88.

²⁶ *Ibid.*, 89.

²⁷ Antulio J. Echevarria II, "Clausewitz's Center of Gravity: It's Not What We Thought," *Naval War College Review*, Vol. LVI No. 1 (Winter 2003): 115.

²⁸ Echevarria II, "'Reining in' the Center of Gravity Concept," 90.

²⁹ *Ibid.*, 92-93.

³⁰ Echevarria II, "Clausewitz's Center of Gravity: It's Not What We Thought," 109.

action or influence can exist in a given battlespace, his approach does not focus resources on elements that will prove decisive.”³¹ He disagrees so strongly with Strange’s theory that he believes that approach only leads to determining a COG by coincidence.³²

Echevarria’s interpretation of Clausewitz’s COG is itself not perfect. First of all, Echevarria believes identifying COGs in limited wars is unnecessary because the objective of limited wars is not the complete defeat of the enemy as emphasized by Clausewitz.³³ If Echevarria is correct, then unless total war is waged against a VEO, identifying its COG would not aid in its defeat. Secondly, he contradicts himself when describing the campaign against al Qaeda. He states “the larger global war on terrorism, is essentially a war that, for the United States at least, cannot end without the neutralization or destruction of that group; hence, it is the kind of war in which the identification and pursuit of a COG serves a constructive purpose.”³⁴ At the time of this statement, the United States was not engaged in total war against al Qaeda and it continues to engage in limited war against that group as well as other VEOs. Echevarria’s interpretation of Clausewitz’s COG concept adds a meaningful approach to attacking COGs but it is certainly not all encompassing and will likely not end the debate about Clausewitz’s true definition of the Center of Gravity. Echevarria’s and Strange’s theories stand in stark contrast to each other, which serves the benefit of drawing a distinction when applying retroactive analyses to the following case studies.

³¹ Antulio J. Echevarria II, “Center of Gravity: Recommendations for Joint Doctrine,” *Joint Forces Quarterly*, Vol. 35, Fourth Quarter, (October 2003): 12.

³² Ibid.

³³ Echevarria, “Reining in’ the Center of Gravity Concept,” 92.

³⁴ Ibid.

CHAPTER THREE: THE LIBERATION TIGERS OF TAMIL EELAM

The military hostilities between the government of Sri Lanka and the Liberation Tigers of Tamil Eelam (LTTE)¹ date back to 1983 when members of the LTTE ambushed and killed a squad of Sri Lankan soldiers.² However, the causes of the conflict date back to the 19th century when the British government in Sri Lanka³ encouraged the Hindu Tamils to immigrate, to work as plantation laborers.⁴ In 1815, the British united the country under one rule. Because the Tamil spoke English, the British appointed them to most of the civil service positions.⁵ This became a major source of complaint and after Sri Lanka gained its independence in 1948 the Sinhalese majority “implemented a series of laws imposing their culture on the Tamil minorities.”⁶ These unfair laws led to decades of friction and unrest in the northern and eastern regions of Sri Lanka, which eventually led to an insurgency.⁷

Much like the leadership of the Islamic State, the head of the Tamil Tigers was a ruthless, charismatic leader named Velupillai Prabakharan. Prabakharan established himself as the leader of LTTE in the late 1970s and his bona fides included the assassination of Jaffna’s mayor in 1975.⁸ His vision transformed the LTTE from a small group of terrorists, who the Federal Bureau of Investigation credits with mainstreaming

¹ Commonly referred to as the Tamil Tigers.

² Ahmed S. Hashim, *When Counterinsurgency Wins*, 3.

³ Prior to its independence Sri Lanka was known as Ceylon.

⁴ Ahmed Hashim, 54.

⁵ Gordon Weiss, *The Cage: The Fight for Sri Lanka and the Last Days of the Tamil Tigers* (New York: Bellevue Literary Press, 2012), 19.

⁶ Niel A. Smith, “Understanding Sri Lanka’s Defeat of the Tamil Tigers,” *Joint Forces Quarterly*, Issue 59, 4th Quarter (December 2010): 40 - 41.

⁷ Steven R. Ratner, “Accountability and the Sri Lankan Civil War,” *The American Journal of International Law*, 106, no. 4 (October 2012): 795.

⁸ Gordon Weiss, 2.

the use of suicide bombings globally,⁹ into an organization equipped with an army, navy and air wing. From its inception, Prabakaran's moral strength and power was the strategic Center of Gravity for the LTTE. He led the LTTE through four wars with the Government of Sri Lanka until the group's decisive defeat and his subsequent death on the Jaffna Peninsula in 2009.¹⁰

On July 23, 1983, the LTTE emplaced a land mine that killed thirteen Sri Lankan soldiers. The soldier's deaths acted as a catalyst for an event known as "Black July."¹¹ After the bodies of the murdered soldiers arrived in the capital of Colombo, mobs of armed Sinhalese civilians spread out across the city seeking vengeance against their Tamil neighbors. At the end of the night, untold numbers of Tamil were dead and by the end of the week more than 100,000 found themselves living in refugee camps.¹² Gordon Weiss contends the Black July riots were the main event in transforming "Tamil militancy from outlier status into an engine of popular rebellion."¹³ Due to the Black July atrocities, India's Prime Minister Indira Gandhi made the decision to train and equip approximately 15,000 Tamil militants.¹⁴ These trained forces included members of the LTTE, who from 1984 to 1987 conducted operations against not only the Sri Lankan military and Sinhalese civilians but also rival nationalist VEOs. This phase known as Eelam War I ended when India deployed a peacekeeping force to the region in an attempt to establish a political solution.¹⁵

⁹ Niel Smith, "Understanding Sri Lanka's Defeat of the Tamil Tigers," 41.

¹⁰ Ahmed Hashim, *When Counterinsurgency Wins*, 3.

¹¹ Gordon Weiss, *The Cage*, 49

¹² *Ibid.*, 48.

¹³ *Ibid.*, 63.

¹⁴ *Ibid.*, 64.

¹⁵ Steven Ratner, "Accountability and the Sri Lankan Civil War," 796.

The Tamil population initially greeted the Indian Peacekeeping Force (IPKF) as liberators, but the euphoria was short lived since the LTTE declined to participate in the accord.¹⁶ An attempt to disarm the LTTE led to ferocious battles with the IPKF, and after suffering the loss of 1,200 soldiers the Government of India pulled the IPKF out of Sri Lanka. Soon after, Eelam War II began with the re-commencement of hostilities directed at the Sri Lankan military, its police forces, and Sinhalese civilians.

In July 1990, the LTTE initiated Eelam War II by attacking twelve police stations and murdering 600 surrendered policemen.¹⁷ In another separate act of barbarity, the LTTE executed 113 Sinhalese and Muslim policemen after promising them safe conduct as a condition of surrender.¹⁸ In October 1990, the LTTE ejected all Muslim residents from the city of Jaffna. Approximately 30,000 Muslims fled their homes, leaving behind all of their possessions.¹⁹

The assassination of former Prime Minister Rajiv Gandhi is perhaps the most stunning attack the LTTE perpetrated during Eelam War II. A female suicide bomber, known only as Dhanu, carried out the attack in India's Tamil Nadu state.²⁰ Prabhakaran ordered the assassination in retaliation for Gandhi's interference in the LTTE's attempts to establish an autonomous state in Sri Lanka. Besides several high profile assassinations, the Battle of Elephant Pass demonstrated the LTTE's ability to conduct conventional military operations.²¹

¹⁶ Gordon Weiss, *The Cage*, 72.

¹⁷ Ahmed Hashim, *When Counterinsurgency Wins*, 98.

¹⁸ *Ibid.*, 98-99.

¹⁹ *Ibid.*, 99.

²⁰ Weiss, 56.

²¹ For a description of the Battle of Elephant Pass see Ahmed Hashim's *When Counterinsurgency Wins*, 99-100.

Analysis

Both sides reached culmination leading to the conclusion of Eelam War III, which was fought from 1996 to 2002.²² Because neither side brought about a decisive defeat, the hostilities seemed destined to continue. A retroactive application of Strange's theory identifies that Prabakharan was able to exist as the Center of Gravity for the LTTE because of the following critical capabilities: 1) the LTTE controlled territory; 2) Prabakharan brutally maintained command and control of his forces; and 3) the LTTE maintained funding mechanisms that enabled it to exist. To maintain these CCs, the critical requirements consisted of: 1) capable military forces and the ability to recruit more forces; 2) dependable leaders in the chain of command; and 3) funding provided by the Tamil diaspora and smuggling operations.

In 2004, Vinayagamoothi Muralitharan (also known as Colonel Karuna), a senior LTTE commander changed sides, along with 5,000 of his troops, after a falling out with Prabakharan. The Sri Lankan government used this split to its advantage when "in exchange for amnesty, Karuna provided assistance to the Sri Lanka army and advice on defeating the LTTE."²³ Prabakharan's critical requirement of having dependable leaders in the chain of command led to the exploitation of a critical vulnerability when Colonel Karuna defected. The government of Sri Lanka quickly took advantage of this vulnerability through its intelligence and military instruments of power, by leveraging Karuna's in-depth knowledge of the LTTE's disposition of troops and utilizing his troops to fight against their former comrades.

²² Ahmed Hashim, *When Counterinsurgency Wins*, 132.

²³ Niel Smith, "Understanding Sri Lanka's Defeat of the Tamil Tigers," 43.

In 2005, the people of Sri Lanka elected Mahinda Rajapaksa president of the country, based on his government's pledge to "crush the LTTE."²⁴ His brother Gotabaya Rajapaksa, acting as the Secretary of Defense, devised a new counterinsurgency (COIN) approach to defeat the LTTE. As Ahmed Hashim notes, "The Sri Lankan COIN paradigm was neither the contemporary Western population-centric approach nor that adopted by the Germans in the Eastern Front...Rather than population-centric it was enemy centric."²⁵ The main emphasis of the approach became killing the enemy. To implement this approach, Sri Lanka needed to regenerate its military. In 2005, with the assistance of China, revitalization of Sri Lanka's military began and over the next three years, its military budget rose 40 percent²⁶ and the size of its military increased from 125,000 to 450,000.²⁷ Besides having the resources available to fight the LTTE, the military knew from past experience it needed a sound strategy. The military leadership recognized Prabakharan as the LTTE's strategic Center of Gravity since he was the key decision maker in the organization. According to Hashim, "His megalomania and authoritarian decision making style were accentuated by the fact that few subordinates dared disagree with his ideas or countermand his orders."²⁸

To maintain its CC of possessing financial mechanisms to support its activities, "the LTTE relied on expatriate support and smuggling to fund ongoing operations and governance in insurgent-held areas."²⁹ After the terrorist attacks in the United States on September 11, 2001, the U.S. Treasury Department assigned the LTTE "Specially

²⁴ Niel Smith, "Understanding Sri Lanka's Defeat of the Tamil Tigers," 42.

²⁵ Ahmed Hashim, 42.

²⁶ Ibid., 43

²⁷ Ibid., 188.

²⁸ Ibid., 191.

²⁹ Ibid., 42.

Designated Global Terrorist Status ... due to its role in supplying global terror groups.”³⁰ As a result, its CR of receiving funding from Tamil expatriates dried up significantly and became vulnerable to exploitation by the Sri Lankan government. Additionally, the Sri Lankan Navy was successful in “strangling the LTTE’s lucrative smuggling trade.”³¹ As part of the revitalization program of the military, the navy added offshore patrol boats (OPBs) to its fleet. These OPBs added an operational capability that did not previously exist in Sri Lanka’s Navy. Combined with improved maritime surveillance systems and command and control capabilities, the navy interdicted the LTTE’s smuggling vessels.³² By utilizing its military and economic IOPs the Sri Lankan government exploited the CVs found in the two CRs of smuggling and funding support from the Tamil diaspora. This enabled the government to degrade the CC of funding mechanisms needed for Prabakharan’s, and thus the LTTE’s, survival.

Perhaps the most crucial CC to the LTTE was controlling territory. Although not officially recognized, Prabhakaran reigned over a semi-autonomous region in Sri Lanka. To maintain control of its territory, the LTTE relied on the CRs of training, arming, and equipping military forces. Although the LTTE consisted of a central governing committee, Prabakharan was the primary decision maker, especially in military matters.³³

The LTTE successfully transformed itself by using Mao’s strategy for protracted guerrilla warfare. Prabakharan led the organization through Mao’s Phase I of organization, consolidation, and preservation, as well as Phase II progressive expansion,³⁴

³⁰ Press Release by the Department of the Treasury, February 11, 2009, p 1 <https://www.treasury.gov/press-center/press-releases/Pages/tg22.aspx> (Accessed December 30, 2015.)

³¹ Niel Smith, 43.

³² Ahmed Hashim, 174.

³³ Ibid., 191.

³⁴ Mao Tse-tung, *On Guerrilla Warfare*, trans. Samuel B. Griffith II (Chicago: University of Illinois Press, 1961), 21.

into a disciplined conventional force. Its military possessed significant naval and army forces that proved themselves in battle. However, with the defection of Colonel Karuna and his 5,000 troops, as well as limited resources due to decreased diaspora support and smuggling interdictions, the LTTE was unable to match Sri Lanka's expanded military might.

During Eelam War IV, from 2006 to 2009, the LTTE is estimated “to have suffered 22,000 combat fatalities.”³⁵ The LTTE resorted to conscripting boys and girls as young as fourteen into its military to continue fighting. One estimate places the number of conscripts under the age of eighteen at sixty percent of its fielded forces during Eelam War IV.³⁶ Sri Lanka used its military IOP to continue its war of annihilation against the LTTE, and in doing so attacked Prabhakaran's CR of having a capable military force and the ability to further recruit replacements. As a result of attacking these CRs, the government gradually reduced the amount of territory Prabhakaran and the LTTE controlled. Finally, the Sri Lankan military annihilated the remaining LTTE fighters on a small spit of land Gordon Weiss calls “The Cage.”³⁷ Prabhakaran was killed along with all of the senior LTTE leadership who made a final stand.

In applying Echevarria's COG theory to the LTTE retroactively, the analysis identified the following areas. The promise of President Rajapaksa to “crush the LTTE”³⁸ supports Echevarria's contention COGs are relevant only during total war. Identifying the total defeat of the LTTE was commensurate with Sri Lanka's desired end state described above. As a self-funded, semi-autonomous organization, it is clear the LTTE's structure

³⁵ Ahmed Hashim, 196.

³⁶ Ibid., 194.

³⁷ Gordon Weiss, 1.

³⁸ Smith, 42.

showed sufficient connectivity for treatment as a single entity. Although Echevarria's theory disallows for a COG to be a source of strength, Prabakharan's ability to "provide raw power, purpose, and direction,"³⁹ supports identifying him as a source of centripetal force. After identification as such, Echevarria's theory would require a direct approach, such as capturing or killing Prabakharan to unbalance the centripetal force he provided. This is the opposite of Strange's indirect approach of attacking and exploiting identified CVs. Due to his repression and brutal treatment of subordinate leaders, it can be argued no one else in the LTTE had the capability to lead the organization should Prabakharan be removed as its head. However, this thesis cannot draw a conclusion as to the effectiveness of Echevarria's theory in determining whether or not the death or capture of Prabakharan in the early phases of Eelam War IV would have been enough to cause the LTTE to seek peace terms with the Government of Sri Lanka, thus ending the conflict.

Summary

The Rajapaksa COIN model proved highly effective in Sri Lanka's fight against the LTTE. The annihilation strategy can serve as a model against other VEOs to include ISIS, but only if the nation fighting the VEO is willing to accept collateral deaths.

According to Niel Smith, after the decisive defeat of the LTTE by Sri Lankan military forces, some pundits espoused its strategy as a model for the United States to emulate in the fight against VEOs.⁴⁰ However, it is highly unlikely the United States would utilize the same strategy (even against foreign VEOs) since the United Nations estimates the Sri

³⁹ Antulio Echevarria, "Center of Gravity: Recommendations for Joint Doctrine," 12.

⁴⁰ NielSmith, 40.

Lankan military killed approximately 7,000 civilians and wounded another 16,700 during the final phase of Eelam War IV.⁴¹

The LTTE bear just as much responsibility for the amount of innocent people killed and wounded since it used the Tamil civilians as human shields and executed anyone trying to flee the conflict zone.⁴² Even with the mitigating factors of the LTTE's actions, this amount of collateral damage would not be an acceptable tradeoff for the U.S. in its efforts to defeat VEOs. However, there are enough similarities between the LTTE and ISIS to attempt to exploit the similar CVs of both organizations. Both rely heavily on smuggling to fund their operations. The Sri Lankan military successfully interdicted LTTE smuggling routes, and the coalition fighting ISIS needs to replicate the strangulation methods employed to accomplish this objective.

⁴¹ Ibid., 42.

⁴² Human Rights Watch, "Sri Lanka: Events of 2009," *Human Rights Watch World Report* (New York: Human Rights Watch, 2010), 347.

CHAPTER FOUR: THE MEDELLIN & CALI CARTELS

During the late 1980s and early 1990s, two ruthless drug cartels nearly turned Colombia into a Narco-State. The Medellin cartel, under the leadership of Pablo Escobar, and the Cali cartel, under the leadership of Pacho Herrera, Jose Santacruz and brothers Gilberto and Migueul Rodriguez Orejuela, were responsible for thousands of deaths in the country as a result of their on-going battle for supremacy of the illicit drug trade.

The extremely vicious Medellin cartel targeted judges, police officers and politicians for assassination if they were not susceptible to bribery.¹ The Cali cartel, on the other hand, directed its violence at the Medellin cartel and did not attack the Colombian government.² From mid-August to mid-December 1989, after the Colombian government arrested 497 traffickers, extradited nine Colombians to the United States, and seized \$250 million in drugs and property, the Medellin cartel hit back by killing 187 government officials and civilians, carried out 250 bombings, and caused \$504 million in damages. These numbers include the intentional downing of Avianca Airlines Flight 203 that exploded over Bogota while en route to Medellin.³

Due to the systemic corruption present in the Colombian judiciary, police forces, and the political system, the government of Colombia formed an elite unit comprised of untainted members from the police, army, and marines who received specialized training from the United States. This unit known as Bloque de Búsqueda (Search Block) became the nucleus for defeating the cartels.⁴ Because it was so ruthless, the Colombian and

¹ Ron Chepesiuk, *Drug Lords: The Rise and Fall of the Cali Cartel* (Preston, UK: Milo Books Ltd., 2003), 140.

² Ibid., 148.

³ Ibid., 140.

⁴ Ibid., 151.

American governments agreed to target the Medellin drug cartel for defeat first.⁵ The U.S. Drug Enforcement Agency (DEA) and Search Block recognized the cartel leadership as the strategic COG in the battle against the drug cartels. This came to be known as the “Kingpin strategy.”⁶ The objective of the strategy was to “dismantle and destroy” the cartels to ensure the national security of Columbia.⁷

Analysis

Since the security forces identified the leader of the Medellin cartel as its strategic Center of Gravity, a retroactive application of Strange’s method identifies Escobar’s critical capabilities as consisting of: 1) remaining alive with the freedom to conduct operations; 2) having the ability to communicate with key leaders in the organization; and 3) remaining influential within the organization. To maintain his CCs, the critical requirements consisted of: 1) having the resources to protect himself; 2) having the resources and methods to effectively communicate; and 3) having the determination to persevere and remain relevant.⁸ This leads one to conclude the following CVs existed. First, in attacking the CC of remaining alive with freedom to conduct operations, the DEA and Search Block targeted the people protecting him. They cultivated confidential informants and cooperating witnesses, who after arrest faced long prison sentences. Initially, there was hesitance on the part of cartel members to cooperate because death remained the penalty for cooperating with the authorities. However, the threat of extradition to the United States convinced them that cooperation was in their best interest.

⁵ Ibid., 139.

⁶ Michael Kenney, “From Pablo to Osama: Counter-terrorism Lessons from the War on Drugs,” *Survival* Vol. 45, No. 3 (August 15, 2011): 190.

⁷ Robert C. Bonner, “The New Cocaine Cowboys,” *Foreign Affairs*, Vol. 89, (July – August 2010): 4.

⁸ Joe Strange, 50.

The Colombian and American governments relied on their law enforcement and diplomatic instruments of power to take advantage of this CV. Fear of assassination from the Cali cartel was another CV exploited by the security forces. This anxiety caused Escobar to remain on the move and limited his CC to effectively communicate with subordinates and maintain control of his cartel. The Americans and Colombians made extensive use of wiretaps and electronic eavesdropping to impede this CC. The American government utilized a classified unit known as Centra Spike to isolate cellular telephone calls or radio transmissions with pinpoint accuracy in a matter of seconds.⁹ The military, intelligence, and law enforcement IOPs all proved effective in this domain. Finally, to attack his ability to remain influential, the security forces disrupted his transnational drug smuggling and cash flow. The law enforcement, intelligence, and military instruments of power disrupted this CC by interdicting the Medellin cartel's drug shipments and seizing its assets.

Because of the effectiveness of attacking his CVs, Pablo Escobar turned himself in to Colombian authorities in 1991. His voluntary surrender came about because the Colombian government agreed not to extradite him to the United States. Escobar continued to lead the Medellin cartel from La Catedral prison, which was more like a luxury resort than a prison. After little more than a year, Escobar escaped from La Catedral in large part because he felt he was not safe from the Cali cartel who still sought to kill him. In December of 1993, members of Search Block tracked down Escobar after the interception of a phone call he placed.¹⁰ He was subsequently killed on the roof of the

⁹ Mark Bowden, *Killing Pablo: The Hunt for the World's Greatest Outlaw* (New York: Penguin Books, 2001), 73.

¹⁰ Ron Chepesiuk, 161.

apartment he was hiding in while attempting to escape.¹¹ With the demise of Escobar and the defeat of the Medellin cartel, Colombia and the United States were now able to pursue their secondary objective of defeating the Cali cartel.

Continuing to rely on the “Kingpin strategy”, the DEA and Search Block recognized the leadership of the Cali cartel as its Center of Gravity. The Cali cartel required CCs similar to the Medellin cartel, which consisted of: 1) remaining alive with the freedom to conduct operations; 2) having the ability to effectively command and control the organization; and 3) remaining influential within the organization. To maintain these CCs, the leadership of the Cali cartel’s CRs consisted of: 1) having the necessary resources to protect the leadership and conduct operations; 2) having dependable subordinate leaders and the ability to communicate with them; and 3) having the ability to influence the Colombian government.

The Cali cartel compartmentalized its operation by having different people handle such tasks as control of money and distribution of drugs.¹² Because of this procedure, the security forces were able to disrupt the leadership’s CC of command and control whenever they arrested key members of the organization. The cartel continued to corrupt the judiciary, political, and law enforcement systems through bribes and extortions. In 1994, Colombia fired 174 police officers for having links to the cartel. Even with these procedures in place, Search Block and the DEA agents were still able to severely disrupt the distribution pipelines and seize significant assets from the cartel. During the first three months of 1995, the Colombian Security Forces arrested 590 drug traffickers, seized two tons of cocaine, 18 tons of coca leaf, and 31 kilograms of heroin. The DEA also

¹¹ Ibid., 162.

¹² Ibid., 179.

contributed to the demise of the Cali cartel by seizing significant quantities of drugs and money. Operation Zorro alone netted 15 traffickers and six tons of cocaine worth an estimated \$100 million.¹³ The continuous pressure and disruption of their distribution network began to affect the Cali cartel's cash flow. Utilizing the military and law enforcement instruments of power, the Colombian and American governments directly affected the cartel's CC of remaining influential.

In addition to seizing drugs and money during raids, President Clinton signed into law Executive Order 12978 Blocking Assets and Prohibiting Transactions with Significant Narcotics Traffickers.¹⁴ As a result, the U.S. Treasury Department blocked the assets of more than 496 businesses and individuals during the first six months of 1995.¹⁵ The Cali cartel, which at its peak had revenues of \$7 billion annually, employed thousands of people and smuggled enormous shipments of drugs to the United States, was strangled into submission by the Colombian and American governments.¹⁶ In 1995, Jose Santacruz, Gilberto Rodriguez Orejuela, and Miguel Rodriguez Orejuela were captured as a result of joint Search Block and DEA operations. Shortly thereafter, Pacho Herrera surrendered to Colombian authorities¹⁷ and the CC of being free to conduct operations was defeated. With the arrest of its leadership, the era of the Cali cartel came to an end.

In applying Echevarria's COG theory to the Medellin and Cali cartels, the analysis identified that the cartels met only two of the three criteria key to determining an

¹³ Ron Chepesiuk, *Drug Lords*, 254

¹⁴ President William Clinton, Executive Order 12978, "Blocking Assets and Prohibiting Transactions With Significant Narcotics Traffickers," *Federal Register* Vol. 60, No. 205 (October 24, 1995)

¹⁵ Chepesiuk, 255.

¹⁶ *Ibid.*, 317.

¹⁷ *Ibid.*, 350.

enemy's COG. First, sufficient connectivity existed in the cartels for treatment as a single body. Second, the leadership of the cartels possessed enough centripetal force to hold them together. Although the Medellin and Cali cartels engaged in violent acts such as bombings and assassinations, they did not maintain a military force. Therefore, using Echevarria's model, identifying the cartel's COGs is irrelevant because the United States and Columbia did not wage war against the two groups.

Summary

The cooperative approach taken by the American and Colombian governments proved effective in defeating the Medellin and Cali drug cartels in the 1990s. This approach can serve as a foundational strategy for defeating transnational VEOs and in particular ISIS, as there are operational similarities between the cartels and ISIS. Both organizations are willing to use violence to attain their objectives and rely on criminal activities to fund their operations. The cartels relied on drug smuggling as its main source of revenue while ISIS relies on illicit oil smuggling to help fund its operations. The smuggling pipelines of the cartels were a CV exploited by the Colombian security forces and American DEA. Likewise, the ancient smuggling routes utilized by ISIS may offer a vulnerability ripe for exploitation by the coalition forces in Iraq and Syria.

The Kingpin strategy, which proved so effective in defeating the Colombian drug cartels, may also prove successful in defeating the Islamic State. Another achievement worthy of emulation is the Colombian government's decision to form the Search Block unit. Due to the systemic corruption within the military and law enforcement agencies, it became necessary to find men and women who were incorruptible. The corruption issue exists in some of the countries that are currently assisting with the strategy to defeat ISIS.

Perhaps units formed and held to similar standards as Search Block could prove more effective in the effort.

CHAPTER FIVE: THE ISLAMIC STATE

The Islamic State of Iraq and Greater Syria (ISIS) is one of the best known VEOs in the world. Jessica Stern and J.M. Berger explain that, “while it is rooted in history, ISIS has also introduced new elements to our understanding of radical Islamism, terrorism, and extremism writ large. For this reason, it commands a disproportionate share of the world’s attention.”¹ ISIS traces its lineage to *The Group of Unification and Jihad*, which went through several name changes since its founding. The group gained prominence when it changed its name to *The Organization of the Base of Jihad in the Land of Two Rivers* commonly referenced as al-Qaeda in Iraq (AQI).² Under the leadership of Abu Musab al-Zarqawi, AQI wreaked havoc in Iraq, attacking coalition forces, Iraqi security forces, and Shiite Muslims. Its goals included winning over Sunnis, defeating the fledgling Government of Iraq, and driving the infidels out of the country.³ Under Zarqawi’s leadership, AQI was the first VEO in Iraq to use videotaped beheadings to instill fear and for recruiting purposes.⁴ Its campaign of attacks against Shia Muslims led to such a high level of sectarian violence and backlash from fellow Sunnis, Usama bin Laden objected to AQI’s tactics and encouraged Zarqawi to change his strategy.⁵ The disagreements over tactics eventually lead to a split with al-Qaeda. After bin Laden’s

¹ Jessica Stern and J.M. Berger, *ISIS: The State of Terror* (New York: Harper Collins, 2015), 11.

² Yonah Alexander and Dean Alexander, *The Islamic State: Combating the Caliphate Without Borders* (Lanham, MD: Lexington Books, 2015), 1.

³ William McCants, *The ISIS Apocalypse: The History, Strategy, and Doomsday Vision of the Islamic State*, (New York: St. Martin’s Press, 2015), 11.

⁴ Michael Weiss and Hassan Hassan, *ISIS: Inside the Army of Terror* (New York: Regan Arts, 2015), 30.

⁵ Jessica Stern and J.M. Berger, *ISIS: The State of Terror* (New York: Harper Collins, 2015), 22.

death, the group found itself ex-communicated from al-Qaeda by bin Laden's successor Ayman al-Zawahiri.⁶

After the coalition killed Zarqawi in an airstrike in 2006, the name of the organization changed to *The Islamic State of Iraq (ISI)*.⁷ The name change was an attempt to obfuscate the influence of foreign fighters to the organization. In 2013, the group morphed into its most recognized name, *The Islamic State in Iraq and Greater Syria (ISIS)*. Finally, in 2014 after securing a series of victories in Iraq and Syria, the group declared itself *The Islamic State*.⁸ The final name change is significant because the group declared an Islamic caliphate without regard to current state sovereignty. The vast majority of Muslims in the region, as well as other VEOs, do not accept the declared caliphate as legitimate and decline to swear allegiance to the new Caliph, Abu Bakr al-Baghdadi.⁹

ISIS currently controls large swaths of land in both Iraq and Syria.¹⁰ It has a net worth estimated between \$1 billion and \$3 billion dollars, making it the richest VEO in the world.¹¹ Its fighters possess a daunting arsenal of advanced military weaponry seized from the Iraqi Army.¹² The army abandoned most of this equipment on the battlefield as it fled from a numerically inferior foe. Brigadier General Hassam Dulaimi of the Iraqi Army credits much of ISIS's battlefield success to the fact that, "the people in charge of

⁶ Aaron Zelin, The Washington Institute, February 4, 2014, <http://www.washingtoninstitute.org/policy-analysis/view/al-qaeda-disaffiliates-with-the-islamic-state-of-iraq-and-al-sham>. (Accessed November 14, 2015.)

⁷ Alexander and Alexander, 5.

⁸ Ibid., 1-2.

⁹ William McCants, 40.

¹⁰ Ross Harrison, "Confronting the 'Islamic State: Towards a Regional Strategy Contra ISIS," *Parameters*, Issue 44, no. 3 (Autumn 2014): 38.

¹¹ Marin Dancau, "The Islamic State of Iraq and the Levant," *Strategic Impact*, No. 53 (2014): 28.

¹² Alexander and Alexander, 55-56.

military operations in the Islamic State were the best officers in the former Iraqi army.”¹³ ISIS established itself to a degree as a sovereign state and began to provide governance, essential services, and enforce laws within its borders.¹⁴

The Islamic caliphate enforces a strict version of Salafist Sharia law on those under its subjugation. Under ISIS’s version of Sharia law, punishment for homosexuality includes being thrown to death from a tall building, committing or being suspected of adultery results in being stoned to death, and simply watching television can result in death. In January of 2015, the group executed thirteen teenagers in Mosul for watching a televised soccer match.¹⁵ ISIS is convinced it is justified in its actions because it is helping to bring about the end times prophecy and this apocalyptic anticipation is part of its appeal to foreign fighters.¹⁶

When discussing ISIS, it is important to distinguish between ISIS as a VEO and the religion of Islam. Youssef Aboul-Enein has three important definitions when discussing this subject. First, *Islam* is “the religious faith involving belief in Allah as the sole deity and in Muhammed as his prophet.” Secondly, *Islamists* are “a group or individual advocating Islam as a political as well as a religious system.” Finally, he defines *Militant Islamists* as “a group or individual advocating Islamist ideological goals, principally by violent means.”¹⁷ Aboul-Enein emphasizes the clear distinction between someone who is a Muslim with a belief in Allah as the sole deity or an Islamist who desires a political system that revolves around the religion of Islam and a Militant

¹³ Alexander and Alexander, 50

¹⁴ Ibid., 290

¹⁵ Ibid., 52.

¹⁶ Stern and Berger, 222.

¹⁷ Youssef Aboul-Enein, *Militant Islamist Ideology: Understanding the Global Threat* (Annapolis, MD: Naval Institute Press, 2010), 1-2.

Islamist who, in a group such as ISIS, commits violence to attain Islamist goals. He goes on to describe how Militant Islamists selectively choose passages from the Koran and the Hadith to justify their twisted narrative.¹⁸ However, Brigadier General Huba Wass de Czege, USA, (Ret), contends ISIS “does not advocate a perversion of Koranic scriptures. It adheres to a strict interpretation of un-ambiguous prophetic passages of the holy book.”¹⁹ When determining a strategy to counter a VEO such as ISIS, these factors should be carefully considered to determine the best strategy.

Center of Gravity Analysis

In defeating a VEO such as ISIS there must be relentless concentric pressure on its CCs and CRs through its CVs in order to affect its COG. My application of Strange’s theory at the strategic level suggests ISIS’s COG is its ideology.²⁰ The following CCs, CRs, and CVs are introduced for future consideration; as the primary focus of this section concerns ISIS’s operational level COG. The first CC allowing ISIS’s ideological COG to exist is religious justification. The CRs enabling this CC are credible religious leaders and a Koranic foundation supporting the ideology. A potential CV to neutralize this CC is Islamic doctrine which negates the ideology. The diplomatic and information instruments of power could prove most effective in counteracting ISIS’s CC, religious justification, but would require a high level Sunni religious leader to condemn ISIS for its perversion of the Holy Scriptures. The Department of State currently has a strategy that “calls for

¹⁸ Youssef Aboul-Enein, 24.

¹⁹ Huba Wass de Czege, “Defeating the Abu Bakr al Baghdadi Gang: A Realistic Strategy,” *Small Wars Journal*, (December 22, 2015): <http://smallwarsjournal.com/jrnl/art/defeating-the-abu-bakr-al-baghdadi-gang-a-realistic-strategy> (Accessed on January 5, 2016).

²⁰ As illustrated in Figure 1, Appendix A.

engaging religious actors and institutions...to mitigate violent conflict.”²¹ Synchronizing this strategy with other lines of effort could exploit this CV. Another strategic level CC is the Islamic State’s vision of the future. The group subscribes to an End Times eschatology foreordained by the prophet Mohammed. The Koranic foundation is also the CR for this CC as well as being a mechanism for recruitment. As with religious justification, a possible CV to nullify this CC is Islamic doctrine, with the proper Sunni cleric leading the condemnation of ISIS’s distortion of scriptures. Once again information is the IOP best suited to address this CC.

The third and fourth CCs which warrants ideology as ISIS’s strategic COG is its ability to instill fear into its enemies and establish legitimacy with the populace under its rule. Its fighting forces and recruiting mechanisms are the CRs enabling these CCs. The ability to sustain these forces is a CV worthy of pursuit. The military, intelligence, and financial IOPs are likely the most appropriate to attack ISIS’s fighting forces.

My application of Strange’s theory at the operational level suggests ISIS’s COG is its military forces.²² The following CCs, CRs, and CVs are identified in order to defeat ISIS using all instruments of power possessed by the U.S., its current coalition allies, and future allies. The coalition must degrade ISIS’s CC of self-sufficiency by disrupting its CRs of possessing multiple funding mechanisms such as illicit oil revenue, extortion, and donations from Gulf States. The key IOPs in this endeavor are law enforcement, intelligence, diplomatic, economic, and military. ISIS’s command and control CC must be countered by disrupting its CRs of having dependable subordinate leaders, as well as

²¹ U.S. Department of State, *Quadrennial Diplomacy and Development Review 2015* (Washington, DC: Government Printing Office, January 2015), 33.

²² As illustrated in Figure 2, Appendix A.

remaining safe from capture or targeted killing. To exploit CVs in this undertaking, the military, intelligence and information IOPs play a significant role.

Finally, the coalition must diminish ISIS's CC of having control of significant areas in the region. Denial and destruction of CRs such as weapons and fighters, reduction of safe havens, and re-occupation of seized territory by legitimate, local, government security forces is instrumental in accomplishing these tasks. The military, intelligence, and diplomatic IOPs are important components needed to effectively achieve these goals. To accomplish all of these objectives, the first order of business is to identify the CVs of these three operational level CCs and exploit them to the coalition's advantage.

The first CC allowing ISIS's military forces COG to exist is its self-sufficiency, and the CR enabling this CC are its funding mechanisms. David Sander and Julia Davis estimate ISIS generates between \$1 million and \$2 million dollars a day in illicit oil revenue.²³ According to David Cohen, the Treasury Department Under Secretary for Terrorism and Financial Intelligence, ISIS utilizes "long standing and deeply rooted black market connected traders in and around the area."²⁴ The smugglers are not members of ISIS and therefore, not violent extremists themselves. To limit the amount of civilian casualties, the coalition limited the number of airstrikes directed against oil transports for this very reason. Russia recently entered the fight against ISIS on behalf of Syrian President Bashar al-Assad and immediately began bombing ISIS targets in Syria. In the

²³ David Sander and Julie Hirschfield Davis, "Struggling to Starve ISIS of Oil Revenue, US Seeks Assistance from Turkey," *New York Times*, September 13, 2014.

²⁴ David Cohen, "Attacking ISIL's Financial Foundation: Remarks of Under Secretary for Terrorism and Financial Intelligence David S. Cohen at The Carnegie Endowment for International Peace," October 23, 2014, <http://www.treasury.gov/press-center/press-releases/Pages/j12672.aspx> (Accessed October 17, 2015.)

wake of the Islamic State's claims to have blown up a Metrojet airliner over Egypt, Russia broadened the scope of its airstrikes to include illicit oil transports. Although this may have an effect on this CR in the short term, it is doubtful airstrikes alone will have a long term effect in disrupting the smuggling of oil for monetary gain.

One of the steps in denying the CC of self-sufficiency of the Islamic State is through its CV of illicit oil revenues. Instead of attempting to interdict the smuggling operation through the military IOP, in the form of kinetic airstrikes as described above, the coalition's effort requires the use of law enforcement and intelligence IOPs to interdict the smuggled oil intact. While in transit, the oil is most vulnerable to interdiction and the United States possesses the intelligence, surveillance, and reconnaissance (ISR) platforms capable of locating the illicit shipments.

Turkey and Iraqi Kurdistan are key allies in the fight against ISIS, but there is a level of cooperation between them and the Islamic State in regards to refining and distributing oil from ISIS's oil fields.²⁵ The coalition needs to utilize the diplomatic IOP to encourage the Turks and Kurds to support its strategy, and can do so by incentivizing them with the promise of being allowed to keep all oil seized from ISIS. The Turks and the Kurds are currently limited in their abilities to seize illicit oil shipments, as they do not possess the same ISR capabilities as the United States. As a gesture of goodwill, the authorities could distribute the seized oil amongst the population residing in the smuggling zones. This would help negate any loss in revenue for the local economy that relies so heavily on the black market oil revenue.

²⁵ Borzou Daraghi and Erika Solomon, "Fueling ISIS Inc.," *Financial Times*, September 21, 2014.

The coalition can also use the economic instrument of power in a carrot and stick method to encourage cooperation. An example of the ‘carrot’ enticement is the recent European Union deal with Turkey to provide three billion euros as leverage to get Turkey to control its borders.²⁶ If necessary, the ‘stick’ of imposing economic sanctions on any state found to be conducting business or providing material support to the Islamic State is another example of using the diplomatic and economic IOPs to achieve the coalition’s goal of denying ISIS’s CC of self-sustainment.

As part of the effort to interdict the Islamic State’s CR funding mechanisms, the coalition must also target its CVs of bulk cash shipments originating from safe havens. Once again the law enforcement and intelligence IOPs will be key to exploiting this CV. As Paul Rexton Kan notes, ISIS does not rely on traditional banking institutions to move illicit funds across borders. This provides the group the advantage of protection from “traditional financial countermeasures.”²⁷ However, it causes ISIS to rely on bulk cash shipments that are susceptible to interdiction and seizure in the same manner as its illicit oil shipments, making it a CV. Once again, the coalition can incentivize Turkey, Iraqi Kurdistan, and even Iraq by allowing them to keep all seized cash shipments. Ideally, the seized money would be utilized to fund the fight against ISIS or other VEOs, thus using the group’s own resources against it.

Interdicting smuggled oil and bulk cash shipments will eventually degrade the Islamic State’s economic power and reduce its self-sufficiency. However, if the coalition truly wishes to shut off oil as a source of revenue for ISIS, it must concentrate on ISIS’s

²⁶ STRATFOR, “The EU-Turkey Immigration Deal Will Not Go Unchallenged,” <https://www.stratfor.com/analysis/eu-turkey-immigration-deal-will-not-go-unchallenged> (Accessed March 31, 2016.)

²⁷ Paul Rexton Kan, “Defeating the Islamic State,” *Parameters*, Issue 44, no. 4 (Winter 2014/2015): 71.

CC of controlling and expanding territory. This CC is enabled by the CR of capable military forces maintaining control of the second CR of established safe havens. ISIS employs the same smuggling routes used to export contraband oil to also smuggle weapons and fighters into Iraq and Syria to meet its CR of being able to field a capable military force.²⁸ The capability currently exists to significantly disrupt these smuggling routes. In 2010, after one of its agents was murdered, the United States Customs and Border Patrol staunchly the flow of drugs into the U.S. along a nine mile sector of the border between Mexico and the U.S. to almost zero.²⁹ Because we are talking about stopping the flow of foreign fighters and weapons into Syria and Iraq, as opposed to drugs flowing into the United States from Mexico, the military and intelligence IOPs are required to achieve this objective.

To ultimately regain control of the oil fields providing the group with its steady stream of funding, Kan recommends the “coalition make recapturing them by Iraqi forces a top priority.”³⁰ The key element to this recommendation is the importance of Iraqi forces, not coalition forces recapturing the oil fields. Currently, none of the coalition members have large enough ground forces in the region to accomplish the task. Even if the coalition forces had the capacity to conduct ground operations against ISIS, to do so would legitimize the Islamic State’s narrative and allow it to capitalize on the propaganda value. This does not mean the military IOP is irrelevant in achieving this objective. It simply means the Iraqi forces need proper training and equipping, that can only be provided by coalition military forces.

²⁸ Paul Rexton Kan, “Defeating the Islamic State,” 73.

²⁹ U.S. Customs and Border Protection, *Holding the Line in the 21st Century: A Risk Based Strategy* (Washington, DC: Government Printing Office, Oct 2015), 19.

³⁰ Kan, 77.

The coalition must use diplomacy to convince the Government of Iraq to take this step toward exploiting ISIS's CV of military formations. Tactically the seizure of oil fields is much easier than conducting military operations in urban terrain (MOUT). Ultimately, if ISIS is to be thoroughly defeated, the Iraqi Security Forces will engage in MOUT operations against it. A smaller operation, such as described above, will provide them much needed confidence and experience prior to a major engagement.

At the same time the coalition is working to deny ISIS its economic power, it must counter the CC of ISIS's command and control. A regularly cited definition of command and control is, "the arrangement of personnel, training, information management...and facilities essential for the commander or other decision maker to conduct operations."³¹ This CC relies on the CR of effective communications to enable it. Electronic eavesdropping, communications jamming, and cyber warfare create critical vulnerabilities in this domain. The intelligence, information, and military IOPs are essential to conducting these operations and contribute greatly to disrupting command and control of an adversary such as ISIS. To effectively direct actions of its forces, ISIS leaders must be able to maintain command and control.

Another line of effort in this endeavor is to identify CVs leading to the opportunity to kill or capture key leaders who are vital CRs, enabling the CC of command and control. These targeted killings and captures disrupt the identified key leader's ability to command and control the organization. The coalition will rely heavily on the military, intelligence, and information IOPs in this effort. The coalition already

³¹ Robert H. Leonhard, Thomas H. Buchman, James L. Hillman, John M. Nolen, and Timothy J. Gilpin, "A Concept for Command and Control," *Johns Hopkins APL Technical Digest*, Vol. 29, No. 2, (2010): 159.

targeted Abu Bakr al-Baghdadi as well as other key leaders of the group to counter ISIS's leadership.³²

On May 16, 2015, coalition forces conducted a raid inside Syria in an attempt to capture Abu Sayyaf, a senior leader in ISIS, who oversaw its illicit oil operations. Special Operations Forces subsequently killed Sayyaf in the raid, but his wife, Umm Sayyaf, was captured and turned over to Iraqi authorities for her role in enslaving women captured by ISIS fighters.³³ Although the raid also resulted in the seizure of documents that have the potential for future intelligence exploitation, it is preferable to capture key leaders alive to capitalize on their knowledge of operations. This raid demonstrated America's resolve in defeating ISIS and has the potential to cause friction in the group's leadership due to the fear of capture.

Identifying key leaders for targeted killing or capture, using the military and intelligence IOPs, can be crucial to destroying a VEO. In targeting the Islamic State's CR of dependable leaders, it is important to understand the concept of *bay'ah* where the leader of one VEO swears allegiance to another. Numerous VEO leaders have sworn *bay'ah* to Abu Bakr al-Baghdadi in support of ISIS. The backing from other VEOs is crucial in providing legitimacy to the Islamic State's claim of a caliphate. *Bay'ah* is sworn to a specific leader of an organization and not the group itself. Therefore, if the coalition can successfully kill or capture al-Baghdadi, the opportunity exists to encourage other VEOs to break from their support of ISIS. As the current leader of ISIS, al-

³² Mohammed Tawfeeq and Hamdi Alkshali, "ISIS Leader Abu Bakr al-Baghdadi in Convoy Hit by Airstrike: Iraq Says," October 12, 2015, <http://www.cnn.com/2015/10/11/world/iraq-al-baghdadi-raid/> (Accessed January 4, 2016.)

³³ Barbara Star, Laura Smith-Spark and Roy Sanchez, "Abu Sayyaf, Key ISIS Figure in Syria, Killed in U.S. Raid," <http://www.cnn.com/2015/05/16/middleeast/syria-isis-us-raid/> (Accessed December 10, 2015.)

Baghdadi brings a level of credibility to the group due to his Islamic scholar background. Stern and Berger note that al-Baghdadi's "education in Islamic law" is far superior to al-Qaeda's leaders, both past and present.³⁴ Removing al-Baghdadi from power provides an opportunity to create a leadership vacuum not easily filled from within the existing ISIS leadership. The information IOP can be a crucial component in developing friction within a VEO. If the above situation is accomplished, the coalition could capitalize on the power vacuum through the use of the information IOP. However, this must be weighed against the potential intelligence significance such a high value target possesses.

Currently, the Islamic State's CC of control of territory extends over vast swaths of land in Syria and Iraq to include major cities such as Raqqa and Mosul. To degrade this CC, the Iraqi Army and Government of Iraq security forces must be completely re-trained and re-equipped. The ultimate objective is the re-occupation of the subjugated areas by legitimate security forces representing the Government of Iraq and accepted as rightful by the local populace.

A retroactive analysis using Echevarria's COG theory is not relevant in this case study because it meets only two of the three criteria key to determining an enemy's Center of Gravity. Although ISIS's structure is sufficiently connected for treatment as a single body, and the leadership under Abu Bakr al-Baghdadi possesses enough centripetal force to hold the group together, the limited war being waged against ISIS is not appropriate to the level of war waged in Echevarria's model.

³⁴ Stern and Berger, *ISIS: The State of Terror*, 37.

Summary

My application of Strange's theory suggests ISIS's COG at the strategic level is its ideology. Based on the identified COG, the CCs of religious justification, ISIS's End Times vision of the future, its ability to instill fear into its enemies, and established legitimacy with the populace under its rule are introduced for future consideration in the effort to defeat the group.

At the operation level, my application of Strange's theory suggests ISIS's COG is its military forces. The CCs of self-sufficiency, command and control of forces, and controlling and expanding territory are key to defeating ISIS. Degrading ISIS's CC of self-sufficiency is accomplished by disrupting its CRs of possessing multiple funding mechanisms, such as illicit oil revenue, extortion, and donations from Gulf States. Countering ISIS's CC of command and control is achieved by disrupting its CRs of having dependable subordinate leaders, as well as remaining safe from targeted killing or capture. Finally, degrading the CC of controlling and expanding territory is realized by attacking the CRs of weapons and fighters, reducing safe havens, and re-occupying seized territory through legitimate, local, government security forces.

CHAPTER SIX: FINDINGS AND RECOMMENDATIONS

Although VEOs do not currently pose an existential threat to the United States, the National Security Strategy makes it clear “the threat of catastrophic attacks against our homeland...still persists.”³⁵ The current U.S. strategy of by, with, and through has proven marginally effective in containing ISIS within the territories it currently occupies in both Syria and Iraq. And there is no indication that the defeat of ISIS which is President Obama’s ultimate objective is imminent. The three case studies examined in this thesis validate the feasibility of using Strange’s theory to attack a VEOs COG. They also demonstrate patterns of effectiveness that yield consistent positive results.

Analysis of the case studies shows several CVs exist within ISIS that are ripe for exploitation using specific instruments of power. At the operational level, CVs of ISIS include: 1) its key leaders; 2) facilitators and smugglers; and 3) military formations. Retroactive analysis using Stange’s method identified similar CVs within the LTTE and the Cali and Medellin drug cartels. The same strategies used to defeat these organizations may prove effective in the fight against ISIS.

The Sri Lankan military recognized the leader of the LTTE, Velupillai Prabakharan, as its strategic COG and revised its counterinsurgency strategy to soundly defeat Prabakharan. The DEA and Search Block identified the leader of the Medellin cartel, Pablo Escobar, and the leaders of the Cali cartel, Pacho Herrera, Jose Santacruz, and brothers Gilberto and Migueul Rodriguez Orejuela as the COGs for those organizations. The Colombian security forces and DEA devised the “Kingpin strategy” to attack and defeat these COGs. Although ISIS’s leadership is not a COG at the strategic or

³⁵ President Barack Obama, *National Security Strategy* (Washington, DC: Government Printing Office, January 2015), 9.

operational levels it is identified as a critical requirement at both levels. Attacking these CRs through identified CVs will likely affect the existence of these CCs.

The strategies used to attack and defeat the COGs of the LTTE and drug cartels deserve consideration in the attempt to neutralize, interdict, and attack the Islamic State's CVs. These include the use of kinetic strikes using the military IOP, cultivating confidential informants, and using electronic countermeasures to disrupt its leadership's ability to command and control. The intelligence and military IOPs should prove most effective to leverage these CVs.

ISIS relies on facilitators and smugglers to enable its CR of maintaining funding mechanisms, necessary for the CC of self-sufficiency. Once again the historical case studies provide examples of success in interdicting this CV. After the revitalization of its military, the Sri Lankan Navy proved adept at interdicting the LTTE's profitable smuggling operations. Its fleet of offshore patrol boats, combined with improved maritime surveillance systems and command and control capabilities, enabled it to "strangle" the smuggling operations.³⁶

The DEA and Colombian security forces also proved successful in disrupting the smuggling operations of the Medellin and Cali cartels. The most important step taken to attack this CV was the establishment of an incorruptible unit known as Search Block. The DEA and Search Block used cooperating witnesses and confidential informants to identify the smuggling pipelines of the organizations and subsequently interdicted the flow of drugs and bulk cash shipments necessary for the survival of the organizations.

³⁶ Ahmed Hashim, 174.

These actions led to the defeat of two Transnational Criminal Organizations generating billions of dollars in revenue annually.³⁷

ISIS relies on its illicit oil smuggling operations that generate approximately \$1 million to \$2 million dollars a day in revenue to meet its CR of having dependable funding mechanisms.³⁸ Using the diplomatic IOP to incentivize Turkey and Iraqi Kurdistan to interdict the shipments of illicit oil and bulk cash shipments creates a potential to disrupt the CR of dependable funding mechanisms. The intelligence, military, and law enforcement IOPs are best suited to identify smuggling routes and movements into and out of areas controlled by ISIS.

The U.S. and its partners could potentially exploit ISIS's dependence on military formations used to facilitate its CR of maintaining safe havens essential for the CC of controlling and expanding territory. Although the Medellin and Cali cartels engaged in violent acts, such as assassinations and bombings, they did not maintain a military force in the same manner as the LTTE and ISIS. Therefore, in attacking the CV of military formations, the LTTE case study is more relevant.

In Eelam War IV, the Sri Lankan military devised a new COIN approach, the main emphasis of which was the killing of the LTTE. To attack Prabakharan's CRs of maintaining capable military forces and the ability to recruit more forces, the Sri Lankan military waged a war of annihilation against the LTTE. From 2006 to 2009, the LTTE is estimated "to have suffered 22,000 combat fatalities and although it resorted to

³⁷ Ron Chepesiuk, 317.

³⁸ David Sander and Julie Hirschfield Davis, "Struggling to Starve ISIS of Oil Revenue, US Seeks Assistance from Turkey," *New York Times*, September 13, 2014.

conscripting young boys and girls, it was never able to replenish its losses.”³⁹ Attacking these CRs enabled the Sri Lankan military to gradually reduce Prabakharan’s CC of controlling territory. This led to confinement of the LTTE on a small spit of land and its ultimate defeat.

The defeat of the Islamic State’s operational COG, its military forces, is necessary to achieve President Obama’s ultimate objective of defeating this VEO. Currently, none of the coalition members maintain large enough ground forces in the region to accomplish this task and the Iraqi military does not have the capacity to affect this COG on its own. Due to the minimal number of ground forces in the region, the annihilation strategy carried out by the Sri Lankan military against the LTTE is not a feasible strategy to employ against ISIS.⁴⁰ A more viable strategy is an indirect approach, where the CVs of military formations are exploited to attack the CRs of safe havens and military forces. The diplomatic and military IOPs are the most appropriate in attacking these CVs.

Recommendations

This thesis demonstrates the viability of using Strange’s Center of Gravity analysis method to achieve the desired objective of defeating ISIS. Currently, however, hegemonic and regional powers are engaged in uncoordinated and often conflicting operations against ISIS. Prior to being able to apply Strange’s theory, the competing interests in the region must coalesce into a cohesive body with agreed upon goals because international cooperation is critical in this endeavor.⁴¹ To achieve this desired unity of

³⁹Ahmed Hashim, 196.

⁴⁰ David E. Johnson, “Fighting the Islamic State: The Case for US Ground Forces,” *Parameters*, Issue 45, No. 1 (Spring 2015): 10-11.

⁴¹ Shawn Brimley, “Tentacles of Jihad: Targeting Transnational Support Networks,” *Parameters*, Issue 36, No. 2 (Summer 2006): 41.

effort, the diplomatic representatives of the United States, Great Britain, France, Russia, Iran, Iraq, Syria, Jordan, Turkey and Saudi Arabia must agree to set aside their strategic and ideological differences and concentrate on defeating ISIS.

Upon reaching diplomatic agreement, establishment of a Combined Joint Interagency Task Force becomes the next priority. Once established, exploitation of ISIS's previously identified CVs can be attacked in a more holistic and purposeful manner using all of the member nation's IOPs. This analysis should be reviewed bi-annually to assess the effectiveness of the indirect approach in defeating ISIS's COG.

APPENDIX A: ISIS CENTERS OF GRAVITY

Figure 1: The Islamic State of Iraq and Syria's Strategic COG



Figure 2: The Islamic State of Iraq and Syria's Operational COG



BIBLIOGRAPHY

- About-Enein, Youssef. *Militant Islamist Ideology; Understanding the Global Threat*, Annapolis, MD: Naval Institute Press, 2010.
- Alexander, Yonah and Dean C. Alexander, *The Islamic State: Combating the Caliphate Without Borders*, Lanham, MD: Lexington Books, 2015.
- Allen, John. "Destroy the Islamic State Now." *Defense One*, (August 2014).
<http://www.defenseone.com/ideas/2014/08/gen-allen-destroy-islamic-state-now/92012>.
- Bonner, Robert C. "The New Cocaine Cowboys." *Foreign Affairs* 89, No. 4 (Jul/Aug 2010): 35-47.
- Bowden, Mark. *Killing Pablo: The Hunt for the World's Greatest Outlaw*, New York: Penguin Books, 2012.
- Brimley, Shawn. "Tentacles of Jihad: Targeting Transnational Support Networks." *Parameters* 36, No. 2 (Summer 2006): 30-46.
- Chepesiuk, Ron. *Drug Lords: The Rise and Fall of the Cali Cartel*, Preston, UK: Milo Books Ltd., 2003.
- Clausewitz, Carl von, *On War*, Edited and Translated by Michael Howard and Peter Paret, New York: Alfred A. Knopf, 1993.
- Cohen, David. "Attacking ISIL's Financial Foundation: Remarks of Under Secretary for Terrorism and Financial Intelligence." *Carnegie Endowment for International Peace*, October 23, 2014. <http://www.treasury.gov/press-center/press-releases/Pages/j12672.aspx>
- Dancau, Marin. "The Islamic State of Iraq and the Levant." *Strategic Impact*, No. 53 (2014): 26-33.
- Daraghi, Borzou and Erika Solomon, "Fueling ISIS Inc." *Financial Times*, September 21, 2014.
- de Czege, Huba Wass. "Defeating the Islamic State: Commentary on a Core Strategy." *Parameters* 44, No. 4 (Winter 2014/2015): 9-63.
- Echevarria, Antulio J. "Reigning in the Center of Gravity Concept." *Air and Space Journal* (Summer 2003): 87-96.
- Echevarria, Antulio J. "Center of Gravity: Recommendations for Joint Doctrine." *Joint Forces Quarterly*, 35, Fourth Quarter (October 2004): 10-17.

- Echevarria, Antulio J. "Clausewitz's Center of Gravity: It's Not What We Thought." *Naval War College Review*, Vol. LVI, No. 1 (Winter 2003): 108-123.
- Eikmeier, Dale C. "Center of Gravity Analysis." *Military Review* (Jul – Aug 2004): 4-10.
- Federal Bureau of Investigation. *Putting Intel to Work: Against ELF and ALF Terrorists*, https://www.fbi.gov/news/stories/2008/june/ecoterror_063008. (Accessed February 6, 2016.)
- Gill, John H. "When Counterinsurgency Wins: Sri Lanka's Defeat of the Tamil Tigers." *The Journal of Military History* 78, No. 1 (Jan 2014): 434.
- Harrison, Ron. "Confronting the "Islamic State:" Towards a Regional Strategy Contra ISIS." *Parameters* 44, No. 3 (Autumn 2014): 38 -46.
- Hashim, Ahmed S. *When Counterinsurgency Wins: Sri Lanka's Defeat of the Tamil Tigers*. Philadelphia, PA: University of Pennsylvania Press, 2013.
- Human Rights Watch, "Sri Lanka: Events of 2009." *Human Rights Watch World Report* (New York: Human Rights Watch, 2010).
- Johnson, David E. "Fighting the Islamic State: The Case for US Ground Forces." *Parameters* 45, No. 1 (Spring 2015): 7-17.
- Kan, Paul Rexton. "Defeating the Islamic State: A Financial-Military Strategy." *Parameters* 44, No. 4 (Winter 2014/2015): 71-80.
- Kenney, Michael. "From Pablo to Osama: Counter-Terrorism Lessons from the War on Drugs." *Survival* 45, No. 3 (Sep 1, 2003): 187-206.
- Levitt, Matthew. "Terrorist Financing and the Islamic State." *Testimony to the House Committee on Financial Services* 13 (2014).
- McCants, William. *The ISIS Apocalypse: The History, Strategy and Doomsday Vision of the Islamic State*. New York: St. Martin's Press, 2015.
- Miller, Gregory. "Violence and the Political State." (lecture Joint Forces Staff College, November 19, 2015).
- Rago, Joseph. "Inside the War Against the Islamic State," *The Wall Street Journal*, December 26, 2014.
- Ratner, Steven R. "Accountability and the Sri Lankan Civil War." *The American Journal of International Law* 106, No. 4 (Oct 2012): 795-808.

- Sander, David and Julie Hirschfield Davis, "Struggling to Starve ISIS of Oil Revenues, US Seeks Assistance from Turkey." *New York Times*, September 13, 2014.
- Smith, Daniel, Kelly Jeter and Odin Westgaard, "Three Approaches to Center of Gravity Analysis: The Islamic State of Iraq and the Levant." *Joint Forces Quarterly*, 78, Third Quarter, (July 2015): 129-136
- Smith, Niel A. "Understanding Sri Lanka's Defeat of the Tamil Tigers." *Joint Forces Quarterly*, 59, Fourth Quarter (Dec 2010): 40-41.
- Star, Barbara and Laura Smith-Spark and Roy Sanchez, "Abu Sayyaf, Key ISIS Figure in Syria Killed in US Raid." *Cable News Network*, May 16, 2015.
www.cnn.com/2015/05/16/middleeast/syria-isis-us-raid/
- Stern, Jessica and J.M. Berger, *ISIS: The State of Terror*, New York: Harper Collins, 2015.
- Strange, Joe. *Centers of Gravity and Critical Vulnerabilities: Building on the Clausewitzian Foundation So That We Can All Speak the Same Language*, Quantico, VA: Marine Corps University Foundation, 1996.
- Stratfor. "The EU-Turkey Immigration Deal Will Not Go Unchallenged."
<https://www.stratfor.com/analysis/eu-turkey-deal-will-not-go-unchallenged>.
(Accessed March 31, 2016.)
- Tse-tung, Mao. *On Guerrilla Warfare*. Translated by Samuel B. Griffith II. Chicago, IL: University of Illinois Press, 1961
- U.S. Customs and Border Protection. *Holding the Line in the 21st Century: A Risk Based Strategy*, Washington, DC: Government Printing Office, 2015.
- U.S. Department of Defense. *Counterterrorism: Joint Publication 3-26*, Washington, DC: Government Printing Office, 2014.
- U.S. Department of Defense. *Quadrennial Defense Review 2014*, Washington, DC: Government Printing Office, 2014.
- U.S. Department of Homeland Security. *Countering Violent Extremism*,
<http://www.dhs.gov/topic/countering-violent-extremism>.
- U.S. Department of State. *Quadrennial Diplomacy and Development Review 2015*, Washington, DC: Government Printing Office, 2015.
- U.S. Embassy, *Secretary Kerry: Threat of ISIS Demands a Global Coalition*, (2014)
- U.S. Joint Chiefs of Staff. *Joint Operation Planning*. Joint Publication 5-0 Washington, DC: Joint Chiefs of Staff, August 11, 2011.

- U.S. President William Clinton. *Executive Order 12978*, Washington, DC: Government Printing Office, 1995.
- U.S. President Barack Obama. *Press Conference With the President in Antalya, Turkey*, whitehouse.gov November 16, 2015, 2. <https://www.whitehouse.gov/the-press-office/2015/11/16/press-conference-president-obama-antalya-turkey>.
- U.S. President Barack Obama. *National Security Strategy*, Washington, DC: Government Printing Office, 2015.
- U.S. President. Barack Obama *Statement by the President on ISIL*, whitehouse.gov September 10, 2015, 4. <https://www.whitehouse.gov/the-press-office/2014/09/10/statement-president-isil-1>
- U.S. National Institute of Justice. Terrorism,
<http://www.nij.gov/topics/crime/terrorism/pages/welcome.aspx>
- Vego, Milan. "Center of Gravity." *Military Review*, (Mar – Apr 2000): 23 – 29.
- Vego, Milan. "Clausewitz's Schwerpunkt: Mistranslated from German, Misunderstood in English." *Military Review*, (Jan - Feb 2007): 101 109.
- Weiss, Gordon. *The Cage: The Fight for Sri Lanka and the Last Days of the Tamil Tigers*, New York: Bellevue Literary Press, 2012.
- Weiss, Michael and Hassan Hassan, *ISIS: Inside the Army of Terror*, New York: Regan Arts, 2015.
- Willoughby, Randy. "Crouching Fox, Hidden Eagle: Drug Trafficking and Transnational Security – A Perspective from the Tijuana-San Diego Border," *Crime, Law and Social Change*, 40, No. 1 (July 2003): 113-142.

VITA

Lieutenant Colonel Lawrence P. Wood is the Individual Mobilization Augmentee to the Chief of Security Forces Operations Branch, Headquarters Air Combat Command, Langley Air Force Base, Virginia. He has over 25 years of experience in the security forces career field, initially enlisting in the Air Force in 1983 as a Security Specialist. Lieutenant Colonel Wood left active duty and entered the Reserve Component of the Air Force in 1994. He graduated in 1998 from Marist College with a Master of Public Administration Degree, and received his commission through the Academy of Military Science. He has performed numerous duties; to include serving as a Wing Public Affairs Officer, Installation Inspector General, Squadron Intelligence Officer, Operations Officer and has commanded squadrons in AMC, and CENTAF.