

F/A-18E Super Hornet, attached to Strike Fighter Squadron 31, and F/A-18F Super Hornet, attached to Strike Fighter Squadron 213, prepare to launch from flight deck of USS *George H.W. Bush* to conduct strike missions against ISIL targets, September 2014 (U.S. Navy/Robert Burck)



Hybrid Threat COG Analysis

Taking a Fresh Look at ISIL

By Michael D. Reilly

However absorbed a commander may be in the elaboration of his own thoughts, it is sometimes necessary to take the enemy into account.

WINSTON CHURCHILL

Debates continue in the media, military, and foreign policy circles about the national strategy to defeat the Islamic State of Iraq and the

Levant (ISIL). Imbedded within these debates are fundamental disagreements about ISIL's strategic and operational centers of gravity. Correctly identifying the center of gravity (COG) of an adversary is critical to designing an operational approach to defeat him. On the other hand, misidentifying the center

of gravity is the clearest path to defeat against any foe—especially a hybrid one. An assessment of ISIL's center of gravity is critical to developing a suitable operational design aimed at its defeat. The first order of business, however, is to determine if ISIL is a hybrid actor and, if so, how that impacts our analysis.

Lieutenant Colonel Michael D. Reilly, USMC, is an Operational Planner at U.S. Pacific Command.

There is an issue, though. Our collective reliance on traditional thinking and continued use of existing COG doctrine is particularly problematic. However, by examining hybrid warfare and expanding the definition of the *center of gravity* beyond that of “hub of all power” by the inclusion of the “modalities of principal use,” commanders and planners can identify critical capabilities, requirements, and most importantly, vulnerabilities more rapidly and set U.S. operational planning on stronger footing. Simply put, a shared understanding of hybrid warfare and centers of gravity are required for a fresh analysis of ISIL.

Complexity, deception, and ambiguity are characteristics of warfare dating back to ancient times that are enjoying a renaissance due to an emerging method of conflict described as hybrid warfare. Hybrid warfare falls into an area of conflict within the gray zone of “competitive interactions among and with state and non-state actors that fall between the traditional war and peace duality.”¹ The emergence of hybrid war, as demonstrated by Hezbollah in 2006, Russia in 2014, and ISIL’s current activities in Iraq and Syria, creates a panoply of problems for policymakers, operational planners, and commanders due to the enigmatic nature of the threat.

Learning from Operations *Desert Storm* and *Iraqi Freedom*, challengers to U.S. power actively avoid actions likely to result in an overwhelming conventional military response. This creates a global context where the United States, as the de facto guarantor of global stability, faces increasing hybrid conflicts as state and nonstate actors develop asymmetric ways to challenge American dominance. Recognizing that hybrid warfare is far more than a subset of irregular warfare, analyst Nathan Freier developed a comprehensive description of hybrid warfare and defines it as an adversary’s integration and use of at least two of the following modalities: traditional warfare, catastrophic terrorism, irregular warfare, and disruptive use of technology.²

Frank Hoffman builds upon Freier’s concept and includes “criminality” within the disruptive modality, since criminal

activities are closely intertwined in many of the current gray zone or limited war conflicts—as in the case of ISIL.³ He defines a *hybrid threat* as “any adversary that simultaneously employs a tailored mix of conventional weapons, irregular tactics, terrorism, and criminal behavior in the same time and battlespace to obtain their political objectives.”⁴ A state or nonstate entity capable of fully integrating these operational-level modalities into a viable and unified course of action across the political, military, economic, social, information, and infrastructure (PMESII) spectrum has a significant advantage over an adversary still approaching warfare from a traditional, irregular, or compound perspective. The blending of multiple, unified, and integrated modalities, void of traditional military customs or norms, makes hybrid war distinct from other types of warfare and makes assessing an adversary’s COG so difficult.

The following definition of a hybrid threat is proposed to gain shared understanding and a framework for analyzing ISIL:

Any adversary that creates a dilemma across the PMESII spectrum by simultaneously employing a tailored mix of traditional warfare and weapons, irregular warfare, catastrophic terrorist actions, and disruptive and/or criminal behavior in the same time and battlespace to obtain political objectives within operational or political limitations.

Freier’s four modalities framework—with the inclusion of criminality alongside the disruptive challenge—is used in this article as the construct to analyze hybrid threats. While every conceivable scenario may not fit comfortably into these modalities, this hybrid threat methodology adequately captures the ways and means required at the operational level to accomplish the desired ends for the majority of opponents U.S. forces will confront in the 21st century.

Hybrid threats, according to Freier, are the Defense Department’s “new ‘wicked problems’ where precise identification of what is most harmful or important is problematic” and “the true

depth, complexity, and impact of these hazards lies un- or under-recognized until attempts to contend with them are well underway.”⁵ By their very nature, hybrid threats, like ISIL, are highly integrated, amorphous, and difficult to analyze. As such, identifying a single unit, force, person, or ideology as the center of gravity is potentially dangerous and misleading. Likewise, identifying a hybrid threat’s critical vulnerabilities is extremely difficult as there is no single source of strength to defeat and no silver bullet powerful enough to neutralize the critical capabilities inherent within a hybrid adversary. The real danger in applying traditional COG analysis to hybrid threats is that it misleads senior leaders into believing that operations against hybrid adversaries will be shorter, less costly, and less risky than is probably the case.

The COG constructs currently used in doctrine and practice either fall short of providing a useful method for discerning a hybrid threat’s center of gravity or omit the concept entirely. This increases the probability of responding too slowly to effectively counter the threat or misidentifying the center of gravity and taking inappropriate actions based upon legacy definitions intended for a traditional interstate construct that may not apply to hybrid adversaries.

Before proposing a new method of analysis, debilitating problems in current approaches must be understood and accepted. In this article, current perspectives on COG analysis are examined with an eye toward determining if those constructs adequately support the analysis of a hybrid threat adversary. This article then recommends an updated method for analysis specific to understanding hybrid threat actors and applies this method to ISIL as it is considered an example of a hybrid threat actor with clear effects on potential future conflicts. Freier calls these asymmetrical conflicts the “hybrid norm” of the future,⁶ while Russell Glenn adds it is critical that military professionals not allow themselves to become myopic in their vision of future threats and see each new conflict as the same as the last, since U.S. and coalition forces are more likely to face hybrid threats in future conflicts.⁷

COG Discussion

Current translations of Carl von Clausewitz's *On War* describe the center of gravity as the "hub of all power and movement, on which everything depends."⁸ Clausewitz approached warfare from the perspective of nation-states using organized violence in a battle of wills, where the ultimate objective was the enemy's submission through the destruction of its military forces. But do the current interpretations and applications of Clausewitz's concept hold true for hybrid threats that may not seek decisive battle?

Joint doctrine defines a *center of gravity* as "the source of power that provides moral or physical strength, freedom of action, or will to act."⁹ The Marine Corps further describes an operational-level center of gravity as "normally an element of the enemy's armed forces" that is the "most dangerous to us or the one that stands between us and the accomplishment of our strategic mission."¹⁰ These definitions provide the doctrinal baseline for threat analysis, but may not fully apply to hybrid threats. The four scholars who stand out as the most useful and comprehensive in their understanding of center-of-gravity analysis, and who are briefly discussed here, are Joe Strange, Dale Eikmeier, Milan Vego, and Antulio Echevarria.

Dr. Strange wrote extensively about COG analysis with an eye to assisting military planners through a logical construct commonly referred to as the "Strange Method." He defines a center of gravity as the "moral or physical strength, power, and resistance." Revolutionary at the time, Strange developed his now famous CG-CC-CR-CV construct that forms the basis of joint doctrine, to assist planners in identifying the center of gravity (CG) along with its critical capabilities (CCs), its critical requirements (CRs), and its potential critical vulnerabilities (CVs).¹¹

Colonel Eikmeier argued that the COG concept is useless if it cannot be readily understood and applied in a real-world planning situation. He defined the center of gravity as "the 'primary doer' with the capability required to achieve

the objective."¹² Understanding that an enemy's center of gravity may be elusive, Eikmeier built upon Strange's CG-CC-CR-CV model to include an assessment of the threat's strategic and operational objectives. This addition assists planners in understanding the critical capabilities required to meet those objectives and points more accurately to the center of gravity (the "doer") that inherently has those capabilities to accomplish that objective.¹³

Professor Vego argued that "the concept of center of gravity is perhaps the most critical element of operational and strategic warfare. No plan for a campaign or major operation can be executed quickly and decisively without identifying enemy and friendly COGs and properly applying combat power to degrade, destroy, neutralize or protect them."¹⁴ He defines a center of gravity as "that source of leverage or massed strength—physical or moral—whose serious degradation, dislocation, neutralization or destruction will have the most decisive impact on the enemy's or one's own ability to accomplish a given military objective," and one that can be associated with all three levels of warfare.¹⁵

Colonel Echevarria identified the center of gravity as the (centripetal) force, or focal point that holds the various entities together.¹⁶ He argues that the COG concept was originally aimed at achieving the total collapse of the adversary's forces and is only applicable for absolute (or total) war where the destruction of the enemy's force is the primary goal. This distinctively Clausewitzian point of view holds true to the essence of *On War*, where each side seeks an advantage against the other in a decisive battle. Echevarria does not advocate the partitioning of centers of gravity at the strategic, operational, or tactical levels, and argues that these are modern artificial constructs and not how Clausewitz viewed warfare.¹⁷ He concludes that the COG concept is not applicable to the array of limited wars (under which hybrid war usually falls) since the concept of attacking the center of gravity often comes in conflict with limited political objectives and rarely results in the total collapse of the enemy's forces through a decisive battle.¹⁸

As demonstrated, there is currently no adequate model or methodology to determine a hybrid threat's center of gravity. The current definitions and methods fail to account for the multimodalities, ambiguity, and political constraints presented by hybrid threats. Joint Publication 2-01.3, *Joint Intelligence Preparation of the Operating Environment*, does not mention hybrid threats or discuss the use of multiple modalities.¹⁹ In the case of a hybrid threat, the center of gravity may not be the traditional source of greatest strength, power, or resistance described by the current definitions. In practice, a single moral or physical source of strength may not exist due to the blending of capabilities and resources required in constructing a hybrid force. This raises an interesting conundrum for planners: what if the center of gravity of a hybrid threat adversary is not his source of greatest strength, power, or resistance? Is the COG concept still relevant to these types of threats?

Eikmeier postulates a theory that could radically change how COG analysis is understood and practiced. Eikmeier also argues that Clausewitz's *On War* was mistranslated by Michael Howard and Peter Paret, resulting in the current understanding of Clausewitz's idea being slightly, but significantly, wrong. He assesses that the "hub of all power" description of the center of gravity is not Clausewitzian; rather it is the product of Howard and Paret's translation. Eikmeier argues that this mistranslation fosters a crucial misunderstanding as Clausewitz never actually uses the term *center of gravity* in German—*gravitationspunkt*. Rather, Clausewitz uses the German word *schwerpunkt* (usually translated as the *center of gravity*), which literally means the weight of focus or point of effort. In practice, Clausewitz may have been describing what is currently identified in doctrine as the "main effort." This makes sense as Clausewitz was most concerned with the decisive battle and defeating the enemy's main effort was the surest way to win the contest of wills.

Doctrinally, the main effort is established to "attain the primary objective of a major operation or campaign."²⁰ This



Soldiers assigned to Charlie Battery, 1st Battalion, 320th Field Artillery Regiment, 2nd Brigade Combat Team, 101st Airborne Division, fire M777 A2 Howitzer in support of Operation *Inherent Resolve* at Platoon Assembly Area 14, Iraq, November 2016 (U.S. Army/Christopher Brecht)

is consistent with this article’s definition of a center of gravity as the actor’s main effort to achieve its operational-level objectives and is simpler to understand and easier to put into practice than the “hub of all power” metaphor. Following this logic, the real task in COG analysis is identifying the enemy’s operational main effort, not necessarily its greatest source of strength.²¹ This definition opens the aperture on COG analysis at the operational level, is applicable to hybrid threat scenarios, and acknowledges that the center of gravity can shift as the situation develops, thus forcing periodic reassessment and, if necessary, reframing of the problem.

In the case of hybrid war, the center of gravity may not be the source of great power, strength, and resistance, or the focal point because the use of a particular force may negate the identified political

objectives, provoke the full application of U.S. military might, or cause unacceptable second- and third-order effects—like the loss of international support. Clausewitz’s concept is still applicable, but the doctrinal definitions and methods for analysis are less useful for analyzing a hybrid threat. Rather, faced with a hybrid threat, planners require an updated method.

Applying a New COG Method to ISIL

An analytical method for hybrid threat COG analysis is proposed here that takes into account the amorphous and agile nature of hybrid threat adversaries. In a hybrid war scenario, identifying the hybrid threat’s operational level center of gravity as the “modality of principal use” enables planners and commanders to develop operational approaches and

designs to quickly and effectively defeat threats, like ISIL, before they escalate to the point where later adaptation is unacceptably costly in blood and treasure.

The six-step analytical process proposed below is intended for use against hybrid threats, but can be successfully used as a general theory for threat analysis. Correctly identifying the center of gravity is critical because, as Vego writes, “operational COGs are linked to both strategic and operational objectives; operational goals and COGs establish the foundation for the selection of tactical objectives.”²² Those acquainted with the Strange and Eikmeier method will note many similarities. This is purposeful as the primary goal is to provide operational planners with a more intuitive method for COG analysis that they can apply quickly and effectively in operational design and the joint operation planning process.



Secretary Kerry closes his speech book after addressing delegates in Human Rights Chamber at United Nations Palais des Nations, following bilateral meeting with Russian Foreign Minister Sergey Lavrov, Geneva Switzerland, March 2, 2015 (State Department)

Step 1: Identify Observed Modalities.

The most important step is identifying the modalities employed by the adversary. During this step, every observed enemy action is categorized into one of the four hybrid modalities: traditional, catastrophic terrorism, irregular, or disruptive technology/criminal activities. Operational planners must pay particular attention to their commander's indications and warnings constructs and priority intelligence requirements as they drive the intelligence collection efforts and greatly influence what enemy action is observed and reported. If information gaps are identified, they must be filled in a timely manner to ensure that threat modalities are observed and identified.

ISIL displays attributes of all four hybrid modalities. First, ISIL displays the traditional modality through its fielded military and militia forces. These forces execute traditional military operations with modern weapons systems against traditional armies (Iraqi and Syrian armed forces) and local militias. ISIL fighters typically wear uniforms, deploy in units, and employ rudimentary combined arms offensive operations. They also defend the ground they have taken with prepared defensive positions. Second, ISIL displays the irregular modality through its use of shadow governments, highly visible

terrorist operations, killings of Sunni and Shia "apostates," and Internet-based recruiting. This modality solidifies its rule in captured areas, frightens potential adversaries, attracts foreign recruits, and increases its stature on the world stage. Third, ISIL displays the disruptive/criminal modality through its vast network of illicit oil trafficking and sales, illegal bulk cash transfers through charities and individuals, stolen foreign aid, kidnapping operations, taxes, and illegal checkpoints. Fourth, ISIL appears to have acquired or produced chemical weapons and may have the intent to use these weapons. If true, this displays a catastrophic terrorism modality that could be used against vulnerable, high-profile targets.

ISIL's extensive information operations (IO) contribute to all four modalities in much the same manner that IO supports multiple lines of effort in joint doctrine. Also, there is considerable overlap between the traditional and irregular modalities as well as the irregular and criminal modalities. Most importantly, ISIL acts very much like a nation-state even though it is a nonstate rogue actor.

Step 2: Identify Adversary's Assessed Objectives and Limitations—Ends. As the modalities of the threat's operation are discovered and identified, an assessment must be made as to the threat's

desired ends, military objectives, and limitations. This assessment must be made in a timely manner to inform decisionmakers and it is critical that planners continuously review and revalidate this assessment as it bears great importance for the correct identification of the center of gravity. Planners must determine the political endstate, the military objectives at the operational level of war, and any limitations (military or political) likely imposed on the forces conducting the actions. This assessment is a critical step as the adversary's desired ends and objectives relate directly to the ways and means required to accomplish those objectives.

Strategically, ISIL espouses the creation of the historical Islamic caliphate. Operationally, ISIL's objectives are to seize the territory required to build the caliphate, establish the economic infrastructure to fund it, build an army to expand it, and terrorize all those who oppose them. They appear to have no political or operational limitations that inhibit their ability to seek their objectives through the use of unrestricted warfare.

Step 3: Identify the Critical Capabilities—Ways. Planners must identify the ways or actions required (or critical) in achieving the desired ends. In keeping with both Strange and Eikmeier, a CC is always an action. CCs are usually noted as an "ability to" perform a certain activity critical to the success of the operation. If multiple CCs are required to accomplish the desired ends, then these should be prioritized in order of necessity. If possible, capabilities should be narrowed down to the fewest number of critical capabilities.

ISIL's strategic CC is the ability to foster international Sunni patronage while keeping the United States from directly confronting its forces on the ground in Iraq and Syria. Its ideological call for a decisive battle to take place in western Syria against Western forces is one of the methods used to keep the United States at bay.

This apocalyptic vision of a grand battle between Islam and the West, coupled with U.S. political limitations, appears to be effective in deterring the United States from committing general

purpose forces to this conflict. U.S. political and strategic guidance places limits on American action and may in effect deter the United States from committing general purposes forces to this conflict. Politically, the United States will not directly support the Bashar al-Asad regime in its fight against ISIL. Strategically, after the long conflicts in Afghanistan and Iraq, the United States seems loath to engage in any long-term stability operations.²³ ISIL leaders know that the current American administration has no appetite for another protracted ground campaign in the Middle East.

Operationally, there are four CCs required to accomplish ISIL's operational objectives. First, it requires the ability to defeat regional challengers and seize terrain. Second, it must have the ability to govern the areas seized. Third, it must have the ability to self-sustain and generate income. Fourth, it must have the ability to recruit, train, and employ forces.

Step 4: Identify the COG—Modality of Principal Use. Once the employed modalities are identified, the adversary's objectives and limitations assessed, and the required capabilities to accomplish these objectives revealed, a determination is made as to which modality (irregular, traditional, catastrophic, or disruptive/criminal) is the enemy's main effort to accomplish those objectives. The modality that possesses the required CCs to accomplish the desired objectives within the identified limitations is now identified as the enemy's center of gravity. It becomes the principal "doer of the action that achieves the ends."²⁴ This is a critical assessment as the subsequent approach and follow-on actions should be designed to attack the center of gravity identified as the modality of principal use since this is the enemy's main effort.

The center of gravity should be the modality that the adversary employs as the main effort to accomplish the operational objectives within the identified or assessed operational limitations.²⁵ For a hybrid force, the modality of principal use provides a type of cohesion for the employed forces to bind. This cohesion of forces, under a principal modality, allows the main effort to deliver the most effective blows

and is consistent with a Clausewitzian view of the center of gravity.²⁶

The highly integrated nature of hybrid warfare makes the delineation between the modality of principal use and the supporting modalities difficult to make. This inherent fusion of modes provides the hybrid actor with the capability to shift main efforts should the situation dictate, depending on its own capabilities, the type of adversary, the political objectives, and self-imposed limitations. Similar to a conventional force shifting main efforts in response to the conditions on the ground, the hybrid threat could potentially shift main efforts as part of the plan or in response to friendly actions. However, changing the main effort at the operational level is no easy task and may provide an opportunity to seize the initiative from the hybrid foe. Additionally, the political objectives or limitations may reduce the flexibility of the hybrid force to shift the main effort and dictate which modality must be prioritized to accomplish the objectives.

Determining ISIL's center of gravity through the traditional methods is difficult and potentially irrelevant. Indeed, applying doctrinal COG analysis to ISIL likely results in various "mirages" that look "good in theory, but rarely exists in the real world in a way useful for military planners."²⁷ In reality, ISIL has no single source of physical or moral power; it is an integrated network of networks with no single, critical node. It is a truly hybrid threat. But that does not mean that it is indestructible or undefeatable.

ISIL contains all four modalities within its hybrid nature, but one modality stands out as its main effort: the traditional. This modality is ISIL's center of gravity to accomplish its operational objectives and create the caliphate. Its real source of power lies in its state-like military forces arrayed on the battlefield engaged in the seizure or defense of terrain, not in its ideology or other moral factors. This is an important distinction as many identify it as a terrorist organization when it is better described as a pseudo-state.

Step 5: Identify the Critical Requirements—Means. Once the center

of gravity—the modality of principal use—is determined, all of the other means and modalities identified are categorized as critical requirements. As Strange notes, these are actual things—nouns—required for the critical capabilities to be fully operative. Similar to current doctrine, this should be a list of the other noted modalities, resources, units, or other means required to execute the CCs such as trained guerrilla forces or a flexible command and control network.

The remaining three modalities, along with all the resources and means contained in the traditional modality, are identified as CRs. Two CRs that must be addressed are ISIL's senior leadership and its ideology. Once located, senior leadership must be killed or captured as they have ordered and carried out barbarous terrorist actions. This is critical to weakening its fielded forces' loyalty and ability to coordinate operations, and there is no place for these leaders in the post-ISIL society. Secondly, ISIL's Salafist jihadist ideology is not the center of gravity; rather, it is a CR necessary for the recruiting and sustainment of the group's stated purposes. Efforts are being made to neutralize the Islamic State's ideological message with counter-messaging, but this is proving ineffective. Defeat on the battlefield is often the best counter-narrative to the jihadist's message.

Step 6: Identify the Critical Vulnerabilities. Some of these CRs (or subsets of CRs) are vulnerable to attack, deficient in some way or not strong enough to defend themselves, and are identified as critical vulnerabilities (CV). Because they are critical, any interdiction, destruction, or neutralization should have a direct or indirect effect on the ability of the center of gravity (the modality of principal use) to accomplish the desired ends. Finding a hybrid threat's CV may be difficult due to its ambiguous and enigmatic nature, and there may be few actual CVs. Planners must resist the pressure to manufacture CVs, looking for the elusive silver bullet, as this only oversells the effectiveness of the operational design.

ISIL shows few CVs, but assessing the traditional modality as its center of

gravity allows for an operational approach designed around defeating that modality as it will have the greatest impact on the group's ability to accomplish its goals. In layman's terms, ISIL is acting more like a traditional conventional force and should be treated as such. Any operational approach that addresses it as just another nonstate actor conducting irregular warfare or terrorism will fail to defeat ISIL because its very nature is more traditional than irregular. Understanding this reality provides insight into why current coalition efforts are failing to defeat it.

To defeat ISIL, coalition forces must engage in a conventional air-land campaign to destroy its uniformed military and non-uniformed militia forces and eliminate its senior leadership. This coalition should be led and manned by those with the most to win or lose in the region—Turkey, Iraq, Jordan, Saudi Arabia, and Kuwait. Only after ISIL's traditional forces are systematically destroyed and its leadership erased can the root causes of Sunni disenfranchisement and abuse by the regimes in Iraq and Syria be addressed.

Recommendations

The fundamental nature of war remains unchanged; however, the character and conduct of 21st-century warfare continues to evolve. Compared to the Clausewitzian vision of conventional interstate conflict, modern warfare is increasingly characterized by the erosion of the state's sovereignty and monopoly of violence coupled with the continuing effects of decolonialization in developing nations, the vacuum created by the fall of the Soviet Union, and the realities of a globally interconnected society. The wars of the 21st century are best described as a transnational, asymmetric mixture of globalization and radicalized tribalism, enabled by high-speed communications and modern weapons, employing ancient and barbaric tactics, sustained by criminality and foreign aid, and located in geographic areas of instability characterized by weak or failed states where poverty is endemic and the majority of the population has little to no access to the political system. These are protracted gray zone conflicts.

Commanders must demonstrate the ability to execute a coup d'oeil in recognizing the hidden truth behind today's complex, nonlinear, and opaque problems that have no simple or easily discernible solutions.²⁸ Confronting these complex hybrid threats places a "premium on the cognitive skills needed to recognize and quickly adapt to the unknown."²⁹ Rapidly and accurately identifying a hybrid threat's center of gravity is critical in mitigating or defeating the most likely type of adversary, like ISIL, that U.S. forces will meet on the 21st-century battlefield. Again, Clausewitz is prophetic and timeless in admonishing the "statesman and commander" to determine the "kind of war" waged and not fall into the trap of entering the desired war and not the real one.³⁰ The methodology proposed in this article could help commanders do just that. JFQ

Notes

¹ Joseph Votel, "The Gray Zone," White Paper, U.S. Special Operations Command, September 9, 2015, 1.

² Nathan Freier, *Strategic Competition and Resistance in the 21st Century: Irregular, Catastrophic, Traditional, and Hybrid Challenges in Context* (Carlisle Barracks, PA: Strategic Studies Institute, May 2007), 2, 18–19.

³ Frank G. Hoffman, "Hybrid vs. Compound War: The Janus Choice," *Armed Forces Journal*, vol. 14 (October 2009).

⁴ Frank G. Hoffman, "On Not-So-New Warfare: Political Warfare vs Hybrid Threats," *War on the Rocks*, July 28, 2014, available at <<http://warontherocks.com/2014/07/on-not-so-new-warfare-political-warfare-vs-hybrid-threats/>>.

⁵ Nathan Freier, "Hybrid Threats and Challenges: Describe . . . Don't Define," *Small Wars Journal*, December 9, 2009, 7.

⁶ Freier, *Strategic Competition*, 47.

⁷ Russell Glenn, "Thoughts on 'Hybrid' Conflict," *Small Wars Journal*, February 24, 2009.

⁸ Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1984), 595–596.

⁹ Joint Publication (JP) 5-0, *Joint Operation Planning* (Washington, DC: The Joint Staff, August 11, 2011), GL-6.

¹⁰ Marine Corps Doctrinal Publication 1-2, *Campaigning* (Washington, DC: Headquarters United States Marine Corps, August 1, 1997), 42.

¹¹ Joe Strange, *Centers of Gravity and Critical Vulnerabilities: Building on the Clausewitzian Foundations So That We Can All Speak the Same Language* (Quantico, VA: Marine Corps University Press, 1996), 43.

¹² Dale C. Eikmeier, "After the Divorce: Clausewitz and the Center of Gravity," *Small Wars Journal*, March 6, 2014.

¹³ Ibid.

¹⁴ Milan Vego, "Center of Gravity," *Military Review* 80, no. 2 (March 2000), 23.

¹⁵ Ibid., 24.

¹⁶ Antulio J. Echevarria II, "Reining in the Center of Gravity Concept," *Air and Space Journal* 17, no. 2 (Summer 2003), 3.

¹⁷ Ibid., 6. Echevarria does note that the current conflict with Islamic terrorism (and al Qaeda), when viewed as a "war to the death," qualifies as Total War and is the type of conflict that warrants center-of-gravity analysis.

¹⁸ Antulio J. Echevarria II, "Clausewitz's Center of Gravity: It's Not What We Thought," *Naval War College Review* 56, no. 1 (2003).

¹⁹ JP 2-01.3, *Joint Intelligence Preparation of the Operating Environment* (Washington, DC: The Joint Staff, June 16, 2009), II-65–II-68.

²⁰ JP 5-0, IV-48.

²¹ Dale C. Eikmeier, "Give Carl von Clausewitz and the Center of Gravity a Divorce," *Small Wars Journal*, July 2, 2013.

²² Vego, 26.

²³ *Sustaining U.S. Global Leadership: Priorities for the 21st Century* (Washington, DC: Department of Defense, January 3, 2012), 6.

²⁴ Dale C. Eikmeier, "A Logical Method for Center of Gravity Analysis," *Military Review* 87, no. 5 (September 2007), 62–66.

²⁵ Ibid.

²⁶ Clausewitz, 485–486.

²⁷ Mark Cancian, "Centers of Gravity Are a Myth," U.S. Naval Institute *Proceedings* 124, no. 9 (September 1998), 30.

²⁸ Clausewitz, 102. Clausewitz described *coup d'oeil* as "the quick recognition of a truth that the mind would ordinarily miss or would perceive only after long study and reflection." Joint Advanced Warfighting School Professor Bryon Greenwald further explains *coup d'oeil* as "an inward eye capable of recognizing and understanding a given situation in a moment, amidst the fog (uncertainty), confusion, danger, and exhausting nature of combat."

²⁹ Frank G. Hoffman, "Hybrid Warfare and Challenges," *Joint Force Quarterly* 52 (1st Quarter 2009), 38.

³⁰ Clausewitz, 88.