An Operational Center of Gravity Analysis of Operation Iraqi Freedom

In preparing a war plan, one of the most important factors to identify is the enemy’s center of gravity. The operational center of gravity must be identified in order to achieve operational objectives which, in turn, support the achievement of strategic objectives. Improper identification of the operational center of gravity can lead to devastating consequences, and potentially different end-states than expected. This paper analyzes different theories of what constitutes an operational center of gravity and applies them to Operation Iraqi Freedom (OIF). This includes a discussion of actual planning considerations for OIF and an analysis of three potential operational centers of gravity. It concludes with the proposal that the operational center of gravity for the Iraqi regime was the land force that included the Republican Guard, Special Republican Guard, Special Security Organization, and Fedayeen Saddam. Through an analysis of the operational center of gravity of OIF further research can be conducted on the actual operations in OIF and their supporting role towards the achievement of operational objectives.
AN OPERATIONAL CENTER OF GRAVITY ANALYSIS OF OPERATION IRAQI FREEDOM

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The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Abstract

In preparing a war plan, one of the most important factors to identify is the enemy’s center of gravity. The operational center of gravity must be identified in order to achieve operational objectives which, in turn, support the achievement of strategic objectives. Improper identification of the operational center of gravity can lead to devastating consequences, and potentially different end-states than expected. This paper analyzes different theories of what constitutes an operational center of gravity and applies them to Operation Iraqi Freedom (OIF). This includes a discussion of actual planning considerations for OIF and an analysis of three potential operational centers of gravity. It concludes with the proposal that the operational center of gravity for the Iraqi regime was the land force that included the Republican Guard, Special Republican Guard, Special Security Organization, and Fedayeen Saddam. Through an analysis of the operational center of gravity of OIF further research can be conducted on the actual operations in OIF and their supporting role towards the achievement of operational objectives.
A plan for a major operation or campaign should be clearly focused on the destruction or neutralization of the enemy’s center of gravity…otherwise, the ultimate operational or strategic objectives will require far more time and resources than envisaged-or can even be fatal for the outcome of the entire expedition.

Milan Vego, *Operational Warfare*

On the afternoon of March 19, 2003 the President of the United States of America, George W. Bush, authorized Secretary of Defense Donald Rumsfeld to execute Operation Iraqi Freedom (OIF).¹ This was to be a military operation unlike any the world had ever seen. Advances in precision weapons, battle space awareness, and intelligence provided the Commander of Central Command (CENTCOM), General Tommy Franks the opportunity to conduct operations at an unprecedented pace. The desired end-state of the war was a free Iraq, removed from tyranny and the threat of weapons of mass destruction (WMD), and in order to accomplish this end-state, war plans focused on the strategic objective of regime change.²

As Vego stated above, every war plan must focus its efforts on the destruction of the enemy’s center of gravity, which in turn will result in the accomplishment of the objectives. Given the current state of affairs in Iraq, it could be argued that CENTCOM planners misunderstood the nature of the war, and in turn improperly determined the center of gravity. This paper will conduct a center of gravity analysis of OIF in an effort to show that the operational center of gravity for Saddam Hussein in Iraq was the ground force that included the Special Republican Guard, Republican Guard, Special Security

² Ibid., 512, 607.
Organization, and Fedayeen Saddam. These forces were those most loyal to Saddam Hussein and his Baathist party.

This study discusses several views of what comprises an enemy’s center of gravity followed by the planning considerations of CENTCOM leading up to OIF and the nature of the determinations made. A review of three potential centers of gravity follows, along with an analysis of why the special land forces were chosen. Lastly, this paper concludes with a summary and conclusions of the analysis. Additionally, as this review is unclassified, many classified intelligence reports are not included and only broad generalizations can be made in some cases.

With the given end-state of a free Iraq and strategic objective of regime change, the planners of CENTCOM were left to determine operational objectives that would support the strategic objectives and more importantly, the operational center of gravity. In this respect, several prominent theorists have made observations about what comprises an enemy’s center of gravity.

Over 2,000 years ago, Chinese warrior-philosopher Sun Tzu stressed the importance of knowing the enemy. His construct of “Know the enemy and know yourself, and in one hundred battles you will never be periled,”\(^3\) begins to describe the importance of understanding the capabilities, strengths, and weaknesses of the enemy and yourself. It also underscores the importance of careful planning based on sound information in order to make a speedy military victory possible.

What Sun Tzu stresses above others is that the center of gravity could be something intangible, and what is most important is to attack the enemy’s strategy before

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he has the capability to resist. This would be a much greater victory than one achieved on the battlefield, as the cost of fighting a war both in money and lives would be saved, but the objectives would be achieved.\(^4\)

Additionally, Sun Tzu describes a policy of what to attack. Specifically, to attack an enemy’s strategy, then his alliances, then his army, and last, but only as a last resort, a city.\(^5\) This stresses Sun Tzu’s belief that an enemy can be defeated in many different ways and it is of utmost importance to define a strategy that attacks a point in the enemy’s defense that will result in victory. His desire to attack alliances emphasizes the potential to win a war without heavy engagement of enemy forces. This observation assumes a single enemy is less likely to fight than one with several allies. Obviously, the strength, or weakness, of the alliance can ultimately be used to the advantage of the attacking force.

Lastly, Sun Tzu’s recommendation of attacking cities as a last resort agrees with his observations that no attacking nation can benefit from a protracted war.\(^6\) Attacking a city could result in a long siege, one that could erode the supplies and morale of an attacking force, as well as the will of the people, without resulting in any sort of incremental gains. A protracted war typically favors the defending force, as time and interior lines of communication allow them to maintain the status quo. Nonetheless, Sun Tzu offers several anecdotes on how to understand the nature of the enemy and how best to attack his strengths.

\(^4\) Ibid., 68-69.

\(^5\) Ibid., 69-71.

\(^6\) Ibid., 58.
Writing during and after the Napoleonic wars of the early 1800’s, Prussian theorist Carl von Clausewitz offered the simplest and most practical of all definitions of the center of gravity in that it is “the hub of all power and movement, on which everything depends.”  He also determined “It is the point upon which all our energies should be directed.”  In the buildup to Gulf War I, much was made of the Iraqi Republican Guard as Saddam Hussein’s source of power, and it was believed a defeat of the Republican Guard would result in a quick, decisive victory. As such, preliminary plans called for a direct assault on the Republican Guard positions in Kuwait as recommended by Clausewitz.

Like Sun Tzu, Clausewitz also discusses the potential for the center of gravity to be any of a number of things:

In 1814 . . . even the capture of Paris would not have ended matters if Bonaparte still had a sizable army behind him. But, as in fact his army had been largely eliminated, the capture of Paris settled everything in 1814, and again in 1815. Again, if in 1812 Bonaparte had managed, before or after taking Moscow, to smash the Russian Army just as he had the Austrians in 1805 and the Prussians the following year, the fact that he held the capital would probably have meant he could make peace in spite of the area still unoccupied . . . On the other hand, after Austrelitz . . . the final blow required was to defeat the Russian Army; the Czar had no other near at hand.

In one case, Clausewitz describes the ability of a regime to remain in power so long as the army still existed; on the other hand if the army is already destroyed, the capture of the city can settle the war. The importance of these two examples will be discussed later in the center of gravity analysis.

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8 Ibid., 595.

9 Ibid., 595.
Clausewitz identifies several examples where the center of gravity for a nation was in fact the army. Alexander, Charles XII, and Frederick the Great all had great armies used to conquer many civilizations over vast amounts of territory.\(^\text{10}\) If the armies had been destroyed, these leaders would have lost their entire power base and likely would not have been remembered as great leaders in history.

Like Sun Tzu, Clausewitz describes potential centers of gravity in various situations:

> In countries subject to domestic strife, it is usually the capital…Among alliances it lies in the community of interest … in popular uprisings it is the personalities of the leaders and public opinion.\(^\text{11}\)

These possibilities highlight the same belief as Sun Tzu that the center of gravity can vary, but the importance does not change.

Strange and Iron discuss the potential for a moral center of gravity in which an enemy force can be defeated, but if the will of the people to defend their homeland is not broken, victory cannot be claimed.\(^\text{12}\) This moral center of gravity can be difficult to defeat, and often leads to long, protracted conflicts that prevent the attacker from gaining a decisive victory.

It is also imperative to discern the difference between a strategic and operational center of gravity. In developing a war plan, strategic objectives and associated centers of gravity are often identifiable at a national level; however, operational centers of gravity level often are not readily identifiable and require a thorough examination.

\(^\text{10}\) Ibid., 596.

\(^\text{11}\) Ibid., 596.

focuses purely on the operational center of gravity of Iraq while discussing its importance to the overall strategic picture. Echevarria highlights this concept by stating, “Defeating tactical centers facilitates tactical objectives that contribute to the defeat of operational centers and assist in achieving operational objectives and so on until national security objectives are reached.”\(^{13}\)

Vego further stresses this important feature; however, he goes a step further in stating that there are tangible and intangible centers of gravity, but the higher the level of war, the more intangible the centers become.\(^{14}\) This idea conflicts with the general belief by Clausewitz that centers of gravity are the areas where mass is the densest, and demonstrates the complexities of determining the proper center.

Lastly, Vego makes a striking comment regarding the identification of a center of gravity at the operational level:

An important characteristic of an enemy center of gravity, especially at the operational and tactical levels, is that it can physically endanger one’s own center of gravity. This is not a feature of an objective, a decisive point, a critical weakness, or vulnerability. In addition, any tangible element of an enemy’s strategic center of gravity represents a potential threat to one’s own strategic center of gravity.\(^{15}\)

Vego’s comments lean towards Clausewitz in that the center of gravity must pose a threat to one’s own force. In this regard, the will of the people, or a capital city would not pose a threat. Rather, some source of power, often military power, upon which war can be waged, would suffice as a center of gravity.


\(^{14}\) Vego, 311.

\(^{15}\) Ibid., 312-313.
Regardless of what the center of gravity is, all theorists concur that identification early in the planning process is crucial to the remainder of the plan and to the outcome of the war. Three questions serve as a test for a center of gravity. What must one defeat or obtain from the enemy to accomplish the objective? Can one achieve the objective without it? Lastly, can the enemy sustain its power base without it? Additionally, in order to determine the enemy center of gravity, one must consider the enemy’s point of view. What is their desired end-state? What are their objectives? These questions all provide a strong litmus test in the analysis of the center of gravity.

A strong center of gravity analysis can be a long process, but often a significant task can be assigned that requires a compressed timeline. For over a decade CENTCOM had a standing plan for a war with Iraq, however, in late 2002 planners saw the need for a new plan and center of gravity analysis. In planning for OIF, General Franks identified nine pillars of strength for Saddam Hussein:

- Leadership
- Internal Security/Regime Intelligence
- WMD Infrastructure / R&D
- Republican Guard / Special Republican Guard Forces
- Selected Regular Army Forces
- Territory
- Infrastructure
- Civilian Population
- Commercial and Diplomatic Leverage

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16 Franks, 526.
The Baath party leadership was a highly loyal organization, filled primarily by family and Sunnis from Saddam’s home tribal area of Tikrit. Because they were an elite minority, the Baathists dedicated significant resources towards internal security. This area of strength focused domestic security to prevent coups, rather than external security. A major concern of CENTCOM was that the Baathist party had been in power for three decades, and most likely would not submit to the coalition without a fight, even if their military had been completely destroyed.17 This coincides with Sun Tzu’s belief:

Put them in a spot where they have no place to go, and they will die before fleeing . . . When warriors are in great danger they have no fear. When they have nowhere to go they are firm . . . If they have no choice, they will fight.18

In the end, backing Saddam loyalists into a corner would only make them more desperate, and in turn, increase their force.

While there was much international debate about the status of Iraq’s WMD programs prior to OIF, there was significant belief that Saddam would use chemical and biological weapons against coalition forces if he believed he was backed into corner.19 Saddam used chemical weapons in the Iran war and again against domestic uprisings within Iraq, therefore this consideration carried much weight.

The Republican Guard was identified early on as a center of gravity during Gulf War I, and as such, it again received significant attention in the planning for OIF. Consisting of the more loyal commanders and troops, the Republican Guard was believed

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17 Ibid., 546.

18 Sun Tzu, 153-154.

19 Franks, 548, 576.
to be the most effective force in the Iraqi military and will be discussed in greater detail in the following section on potential centers of gravity.

Conversely, the regular army forces of Iraq were far from exemplary. Though still deemed the most powerful army in the gulf region with 17 divisions, 100,000 call-up reserves, 2,200-2,600 main battle tanks, 3,700 armored vehicles, and 2,400 major artillery weapons, the regular army lacked modern training and equipment.\(^{20}\) Additionally, the regular army was fielded by conscripts, and organized more to prevent a coup than fight a war. The preferential treatment towards the Republican Guard led to further degradation of morale among the regulars.\(^{21}\)

In 2003, the most concerning part of the regular army was the potential for almost one million reserve call-ups. Weapons caches found in strategic placements in and around Baghdad and other major cities confirmed the belief that when called upon, a reserve force would provide Iraq with overwhelming numerical superiority. Additionally, an even greater defense in depth posture could be created around Baghdad and other cities, in essence creating fortresses that would take long periods of time for the coalition to attain.\(^{22}\)

The infrastructure of Iraq was good; however, the amount of territory and sheer geography was a significant strength. With few avenues of approach for the coalition, Saddam knew he could potentially concentrate forces in certain areas in order to defend against attack. The Tigris and Euphrates rivers also provided adequate geographical


\(^{22}\) Cordesman, 17.
protection in that any advances from Kuwait likely had to cross the rivers at strategic points.

The civilian population provided a base of nearly seven million people from which to draw a reserve force. However, due to extremely divisive religious and ethnic factions, support of the civilian population for the regime was limited. The Baathist party drew primarily from the Sunni Arabs, who comprised only 32%-37% of the Muslim population. Shi’ites and Kurds, whom Saddam had brutally oppressed during his rule, made up 58%-76% of the population. Unrest among the Shi’ites and Kurds were further factors in the recruitment of loyal Sunnis for the Republican Guard and further exacerbated factions within the Iraqi army.

With these factors in mind, it is first important to answer the two questions regarding Iraqi objectives. First, what is the desired end-state? Clearly, Saddam and the Baathist regime wanted a status quo with a later end-state of removal of U.S. and coalition troops from Iraq. Second, what is the enemy’s strategic objective? In order to obtain a status quo end-state the regime needed to stay in power through defense of their nation. After identifying the objective of Saddam and the Baathists to remain in power, there are three primary potential centers of gravity. They consist of one of each of the ideas presented by various theorists:

- A city: Baghdad
- An intangible: the will of the people
- A force: the Republican Guard and other loyalist ground forces

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23 Ibid., 43.
CENTCOM planning, while not specifically identifying Baghdad as the center of gravity, clearly had a focus on Iraq’s capital. “Fortress Baghdad”\textsuperscript{24} as it was referred to by General Franks, not only served as the nation’s capital, but also as the headquarters for almost all military, government, and political activity. Baath headquarters, Iraqi Intelligence Service, Presidential palaces, and various other organizations called Baghdad home, and as such, inside the walls of the city the Regime held a strong position. Underground bunkers, loyal citizens, and more importantly, loyal forces, all protected the city and Baathist leaders. Clearly, in this respect, Baghdad was crucial to the desired end-state and objective.

Clausewitz described “seizure of his capital if it is not only the center of administration, but also that of social, professional, and political activity.” Additionally, as previously stated, in countries with domestic unrest, the capital could be the center of gravity.\textsuperscript{25} This supports the focus on Baghdad as the center of gravity, however, Clausewitz also states:

The possession of provinces, cities, fortresses, roads, bridges, munitions dumps, etc., may be the immediate object of an engagement, but can never be the final one. Such acquisitions should always be regarded merely as means of gaining greater superiority.\textsuperscript{26}

The argument that Baghdad was not the center of gravity can be enhanced by the structure of the military forces, broken into sectors and designed to ensure there would still be a central command even if Baghdad fell.\textsuperscript{27} General Franks also discussed

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\item \textsuperscript{24} Franks, 609.
\item \textsuperscript{25} Clausewitz, 596.
\item \textsuperscript{26} Ibid., 181.
\item \textsuperscript{27} Cordesman, 42.
\end{itemize}
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destroying the headquarters of Iraqi organization as a method to “blind and paralyze the inner circle of leadership.”

In order to determine if Baghdad was in fact a center of gravity, three previous questions must be asked. First, what must one have to accomplish the objective? While Baghdad itself was the center of activity for Iraq, the actual possession of the city was not required to accomplish a regime change. Air strikes completely destroyed all command and control from within Baghdad early in the war. Second, can one achieve the objective without it? If the Baathist regime had retreated to Tikrit, and pulled the Special Republican Guard with them, then the capture of Baghdad would not have resulted in regime change. Finally, could the enemy maintain its power base without Baghdad? While it may have been difficult, the regime could still have functioned and stayed in power for some amount of time. With these points, it is proposed that Baghdad was not an operational center of gravity, but rather a decisive point that when taken, contributed to the achievement of the strategic objective of regime change.

The second concept, the will of the people, is an intangible idea that follows Sun Tzu’s advice to win a war without having to confront the enemy directly. Given the severe domestic strife in Iraq, it could be postulated that a destruction of the will of the people would quickly result in a decisive victory. Without the will of the popular army, reserves, and general public, Saddam would not have the support possible for a viable defense of his nation. This was identified early on by CENTCOM as a vulnerability in the Regime, and as such took considerable aim at reducing the public support.

The Baathists regime, despite being a ruling, oppressive minority, still managed to bring nearly 274,000 conscripts into the army each year. Unfortunately, the low morale

28 Franks, 611.
previously discussed was compounded by “motivational” literature and training that preached martyrdom and sacrifice as ways to defend the country. While this may be an effective method with a small, loyal force, large conscript armies from oppressed majorities do not typically react well to requests for self-sacrifice.  

Additionally, the coalition targeted the will of the people immediately, flying over 158 missions and dropping over 32 million leaflets on civilian and military targets during decisive operations. These drops were combined with timing of force movements for maximum effect, and when combined with the speed of advance of coalition ground forces and devastating air strikes, were extremely effective in quickly eroding the will of the people.

While the will of the people can be the center of gravity, it does not appear its destruction in Iraq would have led to the strategic objective of regime change. First, did the coalition have to destroy the will of the people to achieve regime change? The answer to this is no, as nearly two-thirds or greater of the nation already supported regime change. Second, could regime change occur without the destruction of the will of the people? Yes it could, but likely results would be continued insurgencies following decisive operations.

Lastly, could Saddam maintain his power base without the will of the people? Clearly, having ruled oppressively for three decades through tyranny, he did not require the will of the people to stay in power. As previously stated, the will of the people was not an operational center of gravity, but had Saddam successfully convinced the people to

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29 Cordesman, 42.
30 Ibid., 482.
31 Ibid., 512.
believe in martyrdom and sacrifice, the fight could have been protracted according to Sun Tzu’s concept of leaving any enemy no choice but to die fighting.

The final potential center of gravity is the forces that were most loyal to Saddam and the Baathist regime. These consisted of:

- Six Republican Guard divisions: well trained and equipped with 60,000 to 70,000 men under the supervision of Saddam’s younger son Qusay. Three divisions in the north to defend against Iran and Turkey, and three divisions in the south to defend against Iran and any invasion from Kuwait.  
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- Four Special Republican Guard brigades organized into 14 battalions and designed to protect Saddam and the Baathist party in Baghdad. Comprised of 12,000 to 15,000 soldiers under the supervision of Qusay.  
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- Fedayeen Saddam: the loyal unconventional forces around the country used to suppress uprisings and handle any potential domestic strife. Included 12,000 to 15,000 members.  
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- Special Security Organization (SSO) of 2,000 to 5,000 ultra-loyal soldiers recruited only from loyal areas such as Tikrit. Headquartered in central Baghdad and used for special security of Saddam and the regime.  
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For nearly three decades, Saddam used these forces to destroy all political opposition in Iraq, further securing his power. Additionally, as these forces were recruited from only the most loyal areas and given the best training and equipment, their formidability remained strong. The importance of the Republican Guard was evidenced early on in the operation as nearly eighty percent of air strikes, 15,800, were against ground forces.  

\[32\] Cordesman, 44.
\[33\] Ibid., 47.
\[34\] Ibid., 47.
\[35\] Ibid., 47.
Given these factors, it was the special ground forces, those consisting of the four groups discussed above, who were the operational center of gravity of Saddam and the Baathist regime. First, the desired end-state and objective of the regime to stay in power required the Republican Guard and other special forces to be in place. The regime had no other way to control internal opposition and physically defend the regime. Second, the coalition absolutely had to defeat these forces to accomplish the objective of regime change. Had the Baathist leaders left Baghdad under the protection of the Republican Guard and moved to Tikrit, these forces would still need to be defeated to accomplish the objective.

Third, can the objective be achieved without defeat of these forces? The only possible way victory could have been achieved without the defeat of these forces was through the decapitation strike conducted early in the war. This would have immediately achieved the strategic center of gravity and made the operational center of gravity a mute point. Had this been successful, it is likely direct conflict would have been minimized. However, given the loyalty of these forces and the deception campaigns used by the Baathist regime, the fighting likely would have continued. Finally, could the Baathist regime maintain power without these forces? Without the protection of his loyal forces, Saddam could not have remained in power, regardless of where he ran.

In conclusion, this paper discussed the strategic importance of identification of the operational center of gravity through the writings of theorists Sun Tzu, Clausewitz, and Vego. While they differ in the actually potential of what might be called a center of gravity, they all stress the importance of analysis to the overall success of the war plan. Additionally, a discussion of CENTCOM considerations for the center of gravity showed
several important factors in the determination of this concept. Finally, a closer look at Baghdad, the will of the people, and the special land forces revealed the operational center gravity as the forces comprised of the Republican Guard, Special Republican Guard, Special Security Organization, and Fedayeen Saddam.

Operation Iraqi Freedom employed concepts never seen before in warfare and executed with speed and precision never thought possible. While the coalition employed a force that redefined the concept of force ratios traditionally used in planning, it could be argued the coalition could have achieved any objective they desired. This may be the case, but without a thorough examination and correct identification of the operational center of gravity, the road to victory likely would be long and costly, and potentially, unachievable. In today’s world of finite resources and tolerance, no nation can afford the mistake of an incorrect center of gravity analysis. For in the end, Clausewitz was correct in that “the destruction of the enemy forces is the overriding principle of war, and so far as positive action is concerned, the principal way to achieve our object.”

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37 Clausewitz, 258.


