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THE SHARPEST SWORD:  
COMPELLENCE, CLAUSEWITZ, AND  
COUNTERINSURGENCY

by

Michael T. Plehn, Lt Col, USAF

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## **Disclaimer**

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### ***About the Author***

Lieutenant Colonel Michael T. Plehn is a National Defense Fellow stationed in Washington, D.C. where he is completing Senior Developmental Education at the Center for Strategic and International Studies, a public policy and international security think tank. Prior to his fellowship, he was Commander of the 19th Special Operations Squadron, Hurlburt Field, Florida. Lieutenant Colonel Plehn began his military career at the United States Air Force Academy Preparatory School in 1983 and graduated from the United States Air Force Academy with Military Distinction in 1988. He holds a Bachelor's degree in Astronautical Engineering from the Academy and has a Master's Degree in Aeronautical Science from Embry-Riddle Aeronautical University. He is an alumnus of the College of Naval Command and Staff, where he earned a Master's degree with Highest Distinction in National Security and Strategic Studies. He is also a graduate of the U.S. Air Force's School of Advanced Airpower Studies. In previous assignments, Lieutenant Colonel Plehn has worked at Headquarters, Air Force Special Operations Command and at the Pentagon where he was assigned to the Air Staff's Strategy and Policy Division.

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## ***Abstract***

Compellence, Clausewitz, and Counterinsurgency—a seemingly strange trinity—in actuality, they are closely related subjects with particular relevance in today’s world. The United States has engaged in numerous compellent military actions during the decade of the 1990s; the first five years of the new millennium have seen this trend continue. Despite the country’s obvious affinity for this form of warfare, there is little written about it in U.S. military doctrine or strategy documents. Similarly, while a clear compellence construct exists within Carl von Clausewitz’s seminal book, *On War*—which is studied extensively in military academies and war colleges—the compellence aspects of Clausewitz’s work have not been identified as such previously, and consequently are not emphasized or taught to military officers and strategists. This paper corrects that shortfall and presents Clausewitz’s concept of compellence as a coherent framework. Furthermore, with an on-going counterinsurgency effort in Iraq, it is useful to examine the subject of insurgency and counterinsurgency from the standpoint of compellence. Using both Vietnam and the current insurgency in Iraq as case studies, this paper highlights the important compellent aspects of both wars. Finally, after examining all three of these topics, this paper concludes with recommendations for using airpower and other military and non-military instruments of power for employing and resisting compellence in counterinsurgency. It also recommends further education and inculcation of compellence concepts in military education courses and in joint military doctrine.

## *Table of Contents*

	<i>Page</i>
DISCLAIMER .....	iii
ABOUT THE AUTHOR .....	iv
ACKNOWLEDGMENT .....	V
ABSTRACT .....	vi
INTRODUCTION .....	1
DEFINING COMPELLENCE .....	6
CLAUSEWITZ'S OVERLOOKED COMPELLENCE MODEL .....	15
THE COST-BENEFIT MODEL OF COMPELLENCE .....	23
CASE STUDY: VIETNAM .....	46
CASE STUDY: INSURGENCY, IRAQ, AND AIRPOWER .....	55
RECOMMENDATIONS AND CONCLUSION .....	64
BIBLIOGRAPHY .....	69

## *List of Illustrations*

*Page*

### **Charts**

Chart 1. Vietnam Era Annual DoD Outlays, 1961-1975.....	48
Chart 2. Vietnam Era Cumulative DoD Outlays, 1961-1975.....	49
Chart 3. Vietnam War Annual U.S. Deaths, 1961-1975.....	50
Chart 4. Vietnam War Cumulative U.S. Deaths, 1961-1975.....	51
Chart 5. Iraq Cumulative Costs, April 2003–March 2005.....	57

### **Figures**

Figure 1. Clausewitzian Compellence Model — Basic .....	17
Figure 2. Basic Cost-Benefit Compellence Mode. ....	25
Figure 3. Interactive Compellence Model .....	31
Figure 4. Vietnam Notional Cost-Benefit Compellence Model .....	53

### **Tables**

Table 1. Predicted Outcomes of Compellence.....	33
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## **Chapter 1**

### **Introduction**

Although some might think Compellence, Clausewitz, and Counterinsurgency make an unlikely trinity, the truth is that they are related closely, and the following pages define that relationship and the importance of these three topics to America's strategists, policy makers, and military professionals. Briefly, the theory and study of compellence examines the ways in which nations, groups, and individuals use influence, force, and the threat of force to achieve their desired goals. Although Thomas Schelling formally codified the definition of compellence in the mid-1960s, the idea itself is timeless. Those who study military theory and history might find themselves surprised to note that the concept of compellence also shows up frequently in the basic primer for military strategy, *On War*, by the eminent Prussian theorist Carl von Clausewitz. In this book, long misunderstood to be only a text for classic force-on-force military warfare, Clausewitz describes a basic theory of compellence along with his observations on what makes it succeed and fail. Finally, another ageless topic—insurgency—also can be examined through the lens of compellence, revealing indicators for success and failure in counterinsurgency efforts.

## **Compellence is a Subset of Coercion**

In general, compellence is one of two broad categories of coercion; the other category is deterrence. While they are complementary concepts, compellence and deterrence often are expressed as polar opposites. Most people are familiar with deterrence: it is the use of influence to prevent an undesirable action. It can be as personal as parent-child interaction, “if you misbehave during school, you’ll be grounded for a week”; or as complex as the Cold War’s mutual assured destruction, “if you launch a nuclear strike against us, we will retaliate with an overwhelming nuclear response.” Deterrence, therefore, is primarily concerned with maintaining the status quo.<sup>1</sup> It uses the threat of future pain to prevent a change in the way things are.

Compellence, on the other hand, is exactly the opposite—it desires a change in the status quo—or a return to a previously disrupted status quo.<sup>2</sup> It is the use of influence to create a desirable action. Everyday examples abound: “clean up your room or you’ll get a spanking”; “hand over your wallet and you won’t get hurt”; stop the ethnic cleansing in Kosovo or NATO will continue to strike Serbia.

For policymakers and strategists specifically, compellence is the use of influence—including the threatened and actual use of force—to create a desired political outcome. Operation UPHOLD DEMOCRACY is a benchmark case of compellence. In 1994, the United Nations approved the use of force to oust the Haitian military leadership from power.<sup>3</sup> The ultimatum and threat to Raoul Cedras and his junta were to relinquish power and leave the country, or the United Nations military forces would invade the country and remove them from power.<sup>4</sup> As this case illustrates, the success of

compellence comes from the influencing power to inflict more, or continued, pain on an adversary in order to create a change in the way things are.

### **The Need for Studying Compellence**

First and foremost, compellence is a comparatively under-studied category of the broader subject of coercion—nevertheless, it appears to be a preferred method of political and military engagement for the United States, especially since the end of the Cold War. Nevertheless, compellence is seldom discussed in military or public policy circles within the United States, despite the country’s obvious affinity for it. Throughout the 1990s alone, the United States engaged in no less than three major compellence campaigns: Haiti, Bosnia, and Kosovo.

Despite these operations, and their associated compellence-based strategies, the overarching strategic and military doctrine documents of America seldom mention compellence and its place in the national strategic calculus. A quick word-search through *The National Security Strategy of the United States of America* reveals that variants of the words compel and compellence appear only three times throughout the text.<sup>5</sup> In contrast, variants of the words deter and deterrence occur 15 times in the document. This dearth of compellence terminology is even more pronounced in the National Military Strategy: the words compel or compellence do not appear at all, while the terms deter and deterrence are used 30 times.<sup>6</sup>

This pattern is repeated throughout the capstone and keystone doctrine documents of the Joint Staff and the individual service components: while the words deter and deterrence appear more than 250 times in 16 doctrine documents, the words compel and compellence appear only 58 times; more than half are not even appropriate uses of the

concept of compellence.<sup>7</sup> Even with this basic analysis, it is clear that the country's civilian and military leadership spend more time thinking about and emphasizing deterrence than they do compellence.

This focus on deterrence was understandable during the Cold War—the United States and the Soviet Union needed to reduce the probability of nuclear war between themselves as much as possible. Nuclear deterrence and its many variations offered the right approach for the strategic context at that time. As the Cold War ended and the global security environment lost its defining polarity, the national strategy began to adapt to meet the new strategic context. Presumably, the major security and doctrine documents would have reflected this change as well. Surely, sixteen years after the fall of the Berlin Wall, and after a decade of limited, compellence-based warfare, the country would have codified the basics of this new strategic approach. Such was not the case, and hence the need for this paper.

### **The Intersection with Counterinsurgency**

Not surprisingly, when insurgency is viewed as a form of coercion, it is more akin to compellence than deterrence. Insurgents are more concerned with changing the status quo than they are with maintaining it. There is something about the existing state of things they do not like, and they are willing to use force or influence to create a change in the status quo. By looking at the insurgencies in both Vietnam and Iraq in terms of compellence-based campaigns, a basic cost-benefit analysis shows striking differences between the two wars—potentially good news for the current counterinsurgency effort in Iraq.

Ultimately, this paper seeks to add some much-needed, and very absent, definition to the concept of compellence-based warfare. It uses a mixture of theoretical ideas and case study analysis to illustrate the critical elements of compellence. It concludes by offering some observations on the current approach to the counterinsurgency effort in Iraq, along with recommendations for including compellence in Joint and Service doctrine.

### Notes

<sup>1</sup> Schelling, 72.

<sup>2</sup> Byman and Waxman, 6.

<sup>3</sup> UNSCR 940, 2.

<sup>4</sup> UNSCR 940, 2. Paragraph 4 on page 2 is the relevant text authorizing the use of military force as follows: “Acting under Chapter VII of the Charter of the United Nations, authorizes Member States to form a multinational force under unified command and control and, in this framework, to use all necessary means to facilitate the departure from Haiti of the military leadership, consistent with the Governors Island Agreement, the prompt return of the legitimately elected President and the restoration of the legitimate authorities of the Government of Haiti, and to establish and maintain a secure and stable environment that will permit implementation of the Governors Island Agreement, on the understanding that the cost of implementing this temporary operation will be borne by the participating Member States.” See also Powell, 600-602.

<sup>5</sup> National Security Strategy of the United States of America, 2002. Two of the uses of the word compel are not even appropriate to the concept of compellence—see footnote 7 below for further examples.

<sup>6</sup> National Military Strategy, 2004.

<sup>7</sup> Appropriate uses of compellence are ones that are consistent with Schelling’s definition and the definitions presented in this paper. One of many examples of an inappropriate use of the word “compel” in a doctrine document—for purposes of this discussion—can be found in JP 5-0, page I-12: “Detailed planning may be required to support a contingency of compelling interest....” In addition to JP 5-0, the following doctrine publications were surveyed: Joint Publications JP 1, JP 3-0, JP 5-00.1, and CJCSM 3500.04C; Air Force Publications AFDD 1 and AFDD 1-2; Army Publications FM 100-7 and FM 3-0; Marine Corps Publications MCDP 1, MCDP 1-0, MCDP 1-1, MCDP 1-2, and MCDP 5; and Navy Publications NDP 1 and NDP 2.

## Chapter 2

### Defining Compellence

*Coercion succeeds if the coercer can alter key components in the target state's decision calculus sufficiently to compel concessions.*

—Robert Pape

### The Genesis of Compellence

Thomas Schelling coined the term “compellence” in his groundbreaking book, *Arms and Influence*, as a counterpoint to the well-known concept of deterrence.<sup>1</sup> Schelling examined the overall concept of coercion, and determined that it was composed of two complementary but distinct concepts. Deterrence was the well-known term for describing the process of using influence to prevent an undesirable action. In searching for a similar term to describe the more positive process of using influence to create a desired action, Schelling came up with the term “compellence.”<sup>2</sup>

This chapter explores the broad concept of compellence as first presented by Schelling and then expands upon the basic idea. Leveraging the works of Robert Pape, Daniel Byman and Matthew Waxman, and others, this section examines the fundamental definitions and categories of compellence.

## Defining Compellence

Significantly, for the military professional, Schelling distinguishes between compellence and something he calls “*forcible* action”, or *forcible* offense. The distinction is that forcible offense uses some form and amount of direct action (e.g. military force), that the opponent is unable to block, in order to *take* what is desired. Compellence on the other hand, uses threats, or some degree of direct action to *induce* the opponent into *giving up* what is desired.<sup>3</sup> Interestingly, the means used for compellence and forcible action may be similar, or even the same. According to Schelling, “the difference...is as much in the intent as in the instrument.”<sup>4</sup> This is a critical concept, because some scholars believe that compellence ends when the actual fighting begins.<sup>5</sup> For the military strategist, such a concept is wholly unsatisfying. A complete theory of compellence *must* include the effects of the actual use of force, as well as the effects of the threat of violence.

A brief journey through the somewhat sparse literature of compellence reveals a wide variety of definitions and opinions, but also a reassuring amount of agreement and congruity. In addition to Schelling’s concept of compellence, Byman and Waxman further hone the definition by saying “compellence involves attempts to reverse an action that has already occurred or to otherwise overturn the status quo.”<sup>6</sup> This is fully consistent with Schelling’s observation that compellence “usually involves *initiating* an action.”<sup>7</sup> [emphasis in original]

Other important aspects of compellence include demands, threats, and deadlines.<sup>8</sup> For compellence to be effective, the adversary must know what is being demanded and what the repercussions are if the demands are not met. These are not open-ended

requests, though. They are time limited—in Schelling’s words, “there has to be a deadline, or tomorrow never comes.”<sup>9</sup>

Schelling has one very specific approach to compellence, however; he considers it to be a *risk-based* endeavor. That is, one finds something that the adversary values and then holds it at

risk of further damage or destruction. The adversary will capitulate to one’s demands in order to avoid the risk or threat of future pain. There are several other approaches to compellence, though, and they can be categorized based on whom they try to affect, and how one anticipates that effect to achieve the desired result.

### **Categories of Compellence**

Robert Pape proposed a three-part framework for describing different types of compellence in his book, *Bombing to Win: Air Power and Coercion in War*.<sup>10</sup> His model consisted of a Target, a Mechanism, and an Outcome.<sup>11</sup> Basically, Pape argued that the use of compellence would be directed at some Target group or population, and that by some Mechanism of behavioral change it would create the desired Outcome or political change. With this framework as his guiding principle, he set out to examine different cases of coercive air campaigns throughout military history.

Ultimately, Pape proposed, and many agree, that there are four basic types of compellent strategies: *Risk*, *Punishment*, *Denial*, and *Decapitation*.<sup>12</sup> By applying the Target-Mechanism-Outcome analysis within these different categories of compellence, Pape identified the groups he believed should be targeted for compellence, as well as the mechanism that he expected would result in the desired outcome.



## **Risk-Based Compellence**

*Risk* is the quintessential, classical category of compellence as defined in Schelling's work. It threatens; it makes demands; it sets deadlines; it signals future intentions if the demands are not met. Its defining characteristic is the threat of more pain to come if the demands are not met. The underlying concept for Risk-based compellence is to find something the adversary values and then to hold it at risk of further pain or destruction.

In analyzing this category, Pape determined that the Target was gradual, but progressive, civilian damage; the Mechanism was risk-reward analysis to avoid future costs; and the Outcome was "desired political change."<sup>13</sup>

## **Punishment-based Compellence**

In Pape's analysis, *Punishment* differs markedly from Risk-based compellence in both Target and Mechanism. As the name implies, Punishment does just that. Its Target is the adversary's population and cities, and the Mechanism is a general public outcry or revolt that pressures the adversary's government into capitulating.<sup>14</sup> The Outcome, once again, is defined as a "desired political change." This is coercion and compellence at its ugliest. This is what the Italian airpower theorist Giulio Douhet described in his book *The Command of the Air*, saying, "The time would soon come when, to put an end to horror and suffering, the people themselves, driven by the instinct of self-preservation, would rise up and demand an end to the war...."<sup>15</sup>

While this method of compellence seems largely to have fallen out of favor with major nations, that is not to say that it has fallen out of use entirely. One easily can make the case that insurgencies and insurgents favor this type of compellence above many

others. The activities of Mao Tse-tung's forces in China, the Viet Cong in South Vietnam, and even the insurgents in Iraq show a marked proclivity for inflicting dreadful pain, punishment, and death upon the civilian population in an attempt to achieve their desired political goals.

### **Denial-based Compellence**

*Denial* is Pape's favorite, and preferred, method of compellence: it aims to defeat the adversary's strategy by denying him victory or denying him the ability to get what he wants.<sup>16</sup> The Target for this type of compellence is ultimately the adversary's strategy, but the focus is on "smashing enemy military forces, weakening them to the point where friendly ground forces can seize disputed territories without suffering unacceptable losses."<sup>17</sup> The Mechanism that causes the opponent to capitulate is strategic or operational paralysis caused by the destruction of fielded forces or means of production and transportation. Again, Pape defines the Outcome as "desired political change."

Pape is not alone in his appreciation for Denial-based compellence. Its progress is much easier to measure than the other three forms of compellence because it focuses its effort on measurable quantities: territory, troops, equipment, logistics. There is an added benefit to using Denial in a compellence campaign: if the attempt at compellence fails, one is already well on the way to a conventional or brute force (or as Schelling calls it, *forcible* offense) victory. In essence, many of the targets attacked in Denial-based compellence are the same as those that would be attacked in a brute force military campaign.<sup>18</sup>

## **Decapitation-based Compellence**

This form of compellence was advocated by John Warden, the initial architect of the INSTANT THUNDER air campaign plan for attacking Iraq during Operation DESERT STORM. In this type of compellence, the Target is the opponent's political or military leadership.<sup>19</sup>

The Mechanism that results in the adversary capitulation is a progressive dislocation of the opponent's leadership function and ability, resulting in strategic paralysis or a change in leadership.<sup>20</sup> The Outcome for Pape—yet again—is the ubiquitous “desired political change.”

## **Adapting and Unlocking Pape's Framework**

Unfortunately, Pape's approach to compellence has one serious flaw, as the preceding descriptions illustrate: by considering the Outcome of all compellent activities to be “desired political change” Pape allows himself to sidestep the incredibly difficult task of trying to define how the Mechanism results in a *specific* desired Outcome in a *specific* case of compellence. In essence, Pape has created a framework that is very good for *describing* the types of compellence, but not for *implementing* or *resisting* them.

This shortcoming can be corrected fairly easily by reversing the order in which the framework is applied, however. If, instead of considering the Target first, one considers as a starting point the desired political Outcome—as is done in all good strategy-to-task planning in the military—one puts things in the proper perspective. At this point, one can look at compellence in a more specific and proscriptive way, rather than in Pape's more academic and descriptive fashion.

Thus, the proper order in which the compellence framework should be presented is Outcome-Mechanism-Target. This approach puts the emphasis squarely on what is important—the specific political outcome that initiated the compellent activity in the first place.<sup>21</sup>

### **The Key to Compellence: the Mechanism**

If people have a problem with compellence, they have a problem with one thing: how does it work? The fact that compellence is alive and well in the world is proven on a daily basis in a myriad of ways minor and major. What is not proven, though, is how it works, and—more to the point—what makes it work in some situations and not in others.

This is exactly why Pape’s description of all Outcomes as “desired political change” is so deeply unsatisfying. If exposed to the exact same coercive threats, two people may—and probably will—react in two totally different ways. Without a clearer understanding of what one wants, and what his opponent is willing to sacrifice to keep him from getting it, compellence will remain forever a mystery. Fortunately, by clearly stating the desired political outcomes on both sides in a compellence campaign in terms of tangible items, some of the mystery is stripped away. Equally as important, by focusing clearly on the Mechanism by which one expects the desired Outcome to be produced, one concentrates directly on the question of what makes compellence work.

### **Inside the Mechanism**

In an insightful 1995 thesis for the U.S. Air Force’s School of Advanced Airpower Studies, Thomas Ehrhard expands on Pape’s framework by “unpacking” the Mechanism into three critical concepts: an Action Focus, a Core Policy Process Theory, and a Threshold.<sup>22</sup> The Core Policy Process Theory—equivalent to a military theory of

victory—explains how the application of force against the Action Focus will achieve the desired Outcome. The Threshold concept, on the other hand, seeks to define how much force is required, using a given theory of victory (or Core Policy Process Theory), to result in the desired Outcome.

While Ehrhard did not consider this examination and expansion of the Mechanism function to be the most important part of his thesis, it is clearly an important and extremely relevant piece of analysis for compellence theory.<sup>23</sup> In fact, the Mechanism is *the* critical function in compellence—it is basically the strategic piece of the equation. It is the way in which the desired political ends are achieved with the available means. In this regard alone, Ehrhard has developed an incredibly robust and useful tool for examining the inner workings of compellence.

Well before Ehrhard, Pape, or Schelling, however, another theorist postulated a very robust concept of compellence. The next chapter explores the work of Carl von Clausewitz, the noted military theorist whose book, *On War*, is a fundamental text for teaching strategy to military professionals and policymakers alike. Long interpreted as advocating only force-on-force engagement in warfare, the next chapter shows that Clausewitz actually formulated an insightful theory of compellence that complements his more well-known theories of armed conflict.

## Notes

<sup>1</sup> Schelling, 71

<sup>2</sup> Schelling, 71

<sup>3</sup> Schelling, 79

<sup>4</sup> Schelling, 5.

<sup>5</sup> Schaub, 43. Also compare with Alexander George's concept of Coercive Diplomacy, which is more concerned with threats of violence to exert influence rather than the actual use of violence to exert influence.

<sup>6</sup> Byman and Waxman, 6

## Notes

<sup>7</sup> Schelling, 72

<sup>8</sup> Schelling, 72-75

<sup>9</sup> Schelling, 72

<sup>10</sup> Pape, 4. Pape intentionally uses the term “coercion” in the same sense as the word “compellence” and says so in footnote six: “‘Coercion’ is the word I use to refer to the same concept as Schelling’s ‘compellence.’” For consistency, this paper will use the term “compellence”—by Pape’s own admission the intent and sense of the terminology are identical.

<sup>11</sup> Pape, 56.

<sup>12</sup> Pape, 58.

<sup>13</sup> Pape, 66-67.

<sup>14</sup> Pape, 56.

<sup>15</sup> Douhet, 58.

<sup>16</sup> Pape, 69. Pape also divides denial into three subcategories: strategic interdiction, operational interdiction, and attrition of military forces; see page 75.

<sup>17</sup> Pape, 69.

<sup>18</sup> Mueller, 191-192.

<sup>19</sup> Pape, 80.

<sup>20</sup> Pape, 57.

<sup>21</sup> Ehrhard, 17. Reversing the order of Pape’s Target-Mechanism-Outcome into the more logical planning sequence of Outcome-Mechanism-Target makes sense because, as Ehrhard says, “The Pape framework is ordered in such a way that the analyst considers the most important element last, which seems intuitively backward.”

<sup>22</sup> Ehrhard, 23.

<sup>23</sup> Ehrhard, 72. He considers the analysis of domestic and third-party outcomes the major contribution of his work.

## Chapter 3

### Clausewitz's Overlooked Compellence Model

*War is thus an act of force to compel our enemy to do our will.*

*—Carl von Clausewitz*

The Prussian military theorist Carl von Clausewitz is considered by many to be the preeminent thinker on war and the use of military force. One of his most famous observations is that “war is not merely an act of policy but a true political instrument, a continuation of political intercourse, carried on with other means.”<sup>1</sup> With this simple sentence, he transformed the violence and chaos of warfare into a reasoned tool of political will.

Equally as important, Clausewitz clearly understood that warfare was an act of compellence, not unrelenting violence. This is such a key proposition that he opens his book with it, saying in the opening line, “War is thus an act of force to compel our enemy to do our will.”<sup>2</sup> He does not say that war is an act of force to kill all of our enemies and then do what we will with the remaining goods, land, and people. Rather, he says, the purpose of war is to compel the adversary to do what one wants done. From this central proposition at the beginning of his book, Clausewitz then describes the basic elements necessary to exert such compellence.

## The Basic Clausewitzian Compellence Model

It would be presumptuous to speak for Clausewitz regarding coercion and compellence; however, it is worthwhile and reasonable to highlight his own words and gather them together in a logical fashion that reveals a Clausewitzian model of compellence. Perhaps Clausewitz might have done this himself, given more time to edit his self-admitted unfinished work.

Although elements of his thoughts on compellence are scattered throughout the book—often in no particular order—Clausewitz outlines the basic framework for his concept of compellence on page 92 of *On War*:

Since war is not an act of senseless passion but is controlled by its political object, the value of this object must determine the sacrifices to be made for it in *magnitude* and also in *duration*. Once the expenditure of effort exceeds the value of the political object, the object must be renounced and peace must follow. [emphasis in original]

This short—but incredibly rich—quotation contains a complete theory of compellence-based warfare in itself. It describes the reason for the war (the political object); it frames the determinants of the war's outcome in terms of sacrifices in magnitude and duration of effort, and; it proposes a theory of victory—complete with a threshold that must be reached—in order to win the war.

Expressed graphically, Clausewitz's basic compellence framework would look like Figure 1.



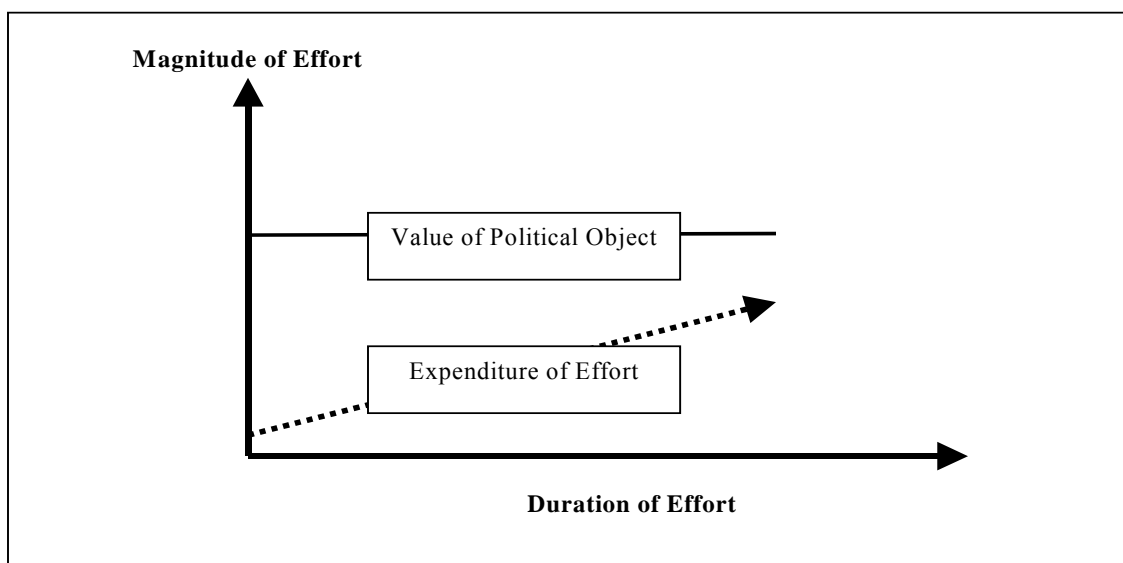


Figure 1. Clausewitzian Compellence Model.

### Figure 1. Clausewitzian Compellence Model — Basic

Using Figure 1 as a basic model, Clausewitz says that the application of force will continue until the costs of war, as expressed in the expenditure-of-effort line, exceed the value of the political object that is the purpose of the war. If the adversary's costs exceed the value of what he is fighting for before one's own costs become unacceptable, then the adversary will capitulate, and one will have succeeded in compelling him to do so.

This basic cost-benefit approach to compellence should be familiar to economists, game theorists, and political scientists alike since it closely resembles the standard expected-utility theory common to these fields. While there are many limitations and shortfalls to this approach, it is, nevertheless, a valid starting point for all discussions of compellence, decision making, and human behavior. In fact, the next chapter will explore in detail the concept of compellence as a cost-benefit analysis.

## Theories of Victory

Regardless of how decisions ultimately are made to start and end wars, politicians and strategists alike should be able to present their theory of victory for winning a war. Simply put, a theory of victory explains how the application of force will result in the desired outcome.<sup>3</sup> A theory of victory is analogous to Ehrhard's Core Policy Process Theory, as described earlier in Chapter Two.<sup>4</sup> It explains how the threat or application of force translates into political change in the adversary's decision-making process, resulting in the desired political outcome.

As stated earlier, modern compellence theory recognizes no less than four major categories of compellence, each with their own mechanism or theory of victory.<sup>5</sup> Clausewitz also proposes several theories of victory in his book, and they align very closely with modern-day compellence theory.

Recalling Ehrhard's adaptation of Pape's framework as Outcome-Mechanism-Target, it is easy to see the congruence between Clausewitz's ideas and modern-day compellence theory. One quickly sees that the Outcome is equivalent to the desired political endstate, or Clausewitz's political object.<sup>6</sup> Next, the Target is the set of things against which force must be applied—as the following paragraphs will show, Clausewitz presents a variety of target sets depending on the desired method of compellence that will be employed. Finally, and most important, is the Mechanism—the method by which the application of force results in the desired outcome.<sup>7</sup> More simply put, in the Pape framework the Mechanism *is* the theory of victory, while in the more robust Ehrhard expansion of Pape's framework, the Core Policy Process Theory inside the Mechanism is the equivalent of the theory of victory. Using these concepts, one can examine Clausewitz's theories of victory more closely.

## Clausewitz's Theories of Victory

Reasoning from the abstract to the actual, as was his style, Clausewitz defines three very generic theories of victory in warfare. His first theory of victory is an abstract one, meaning that it is a theoretical construct that is used more for explanatory purposes than actual implementation. Clausewitz postulates that, in theory, an enemy must be disarmed—and rendered unable to continue the struggle—before one can achieve victory.<sup>8</sup> Such disarmament consists of three broad objectives: destroying the armed forces, occupying the country, and breaking the enemy's will.<sup>9</sup> Significantly, Clausewitz also adds:

But the aim of disarming the enemy (the object of war in the abstract, the ultimate means of accomplishing the war's political purpose, which should incorporate all the rest) is in fact not always encountered in reality, and need not be fully achieved as a condition of peace.<sup>10</sup>

Clausewitz recognizes that disarming the enemy is a theoretical standard, and “on no account should theory raise it to the level of a law.”<sup>11</sup> Nevertheless, this abstract theory of victory seems to be the one that has gained the most favor within military circles that study Clausewitz from a force-on-force perspective. There are a variety of reasons for this, but the most valid one is probably that it is the easiest to understand, implement, and measure.

Moving from the realm of the abstract into the world of reality, Clausewitz postulates two more theories of victory, saying that the “Inability to carry on the struggle can, in practice, be replaced by two other grounds for making peace: the first is the improbability of victory; the second is its unacceptable cost...Not every war need be fought until one side collapses.”<sup>12</sup>

## Clausewitz's Forms of Compellence

Clearly, Clausewitz accepted, and even embraced, the concept of compellence, more than a hundred years before it was even postulated. He captured the essence of Schelling's risk-based compellence in the following words, "When we attack the enemy, it is one thing if we mean our first operation to be followed by others until all resistance has been broken; it is quite another if our aim is only to obtain a single victory, in order to make the enemy insecure, to impress our greater strength upon him, and to give him doubts about his future."<sup>13</sup>

Clausewitz strengthens his concept of compellence by identifying some of the costs associated with war and compellence. While not an exhaustive list, this adds some definition to his earlier statement about the sacrifices to be made in the contest for a political object.

Specifically, he says, "The enemy's expenditure of effort consists in the *wastage of his forces*—our *destruction* of them; and in his *loss of territory*—our *conquest*."<sup>14</sup> [emphasis in original] So two of the major costs that can be imposed on an adversary—and also upon oneself—are destroying his army and occupying his land. It is often said that many military professionals interpret Clausewitz's ideas solely as a call to attack an enemy's forces and seize his territory, and this is another example of where this confusion arises. Once again, Schelling's words come to mind, however; "The difference...is as often in the intent as in the instrument."<sup>15</sup>

Clausewitz even goes beyond Schelling's risk-based compellence, and also briefly discusses punishment-based compellence, and compellence by denial. The following passage highlights both:

In addition, there are three other methods directly aimed at increasing the enemy's expenditure of effort. The first of these is *invasion*, that is *the seizure of enemy territory; not with the object of retaining it* but in order to exact financial contributions, or even to lay it waste....The second method is to give priority to operations that will increase the enemy's suffering...The third, and far the most important method, judging from the frequency of its use, is *to wear down* the enemy...Wearing down the enemy in a conflict means using *the duration of the war to bring about a gradual exhaustion of his physical and moral resistance*.<sup>16</sup> [emphasis in original]

Examining these three methods in detail illustrates Clausewitz's grasp on the different forms of compellence. The first method that he mentions, *seizing enemy territory temporarily*, can be construed as either compellence by punishment or denial. The second method, *increasing the enemy's suffering*, is clearly compellence by punishment. Finally, the third method, *wearing down the enemy*, is clearly compellence by denial.

## Summary

One easily can see, more than a century before Schelling, Pape, or Byman and Waxman, Clausewitz recognized and elucidated the basic concepts of compellence. Despite scattering the elements of his theory in many places throughout his book, he nevertheless created a complete, and fairly comprehensive, analysis of compellence theory. This is incredibly significant for military professionals, especially for those who consider Clausewitz to be the definitive text for military operations and planning. Pure destruction is not the aim of Clausewitz's theory on war—it never was, and never will be. Methods must be adapted to the circumstances, and the use of force can be just as powerful for shaping behavior as it can be for military effect.

The remaining chapters of this paper examine compellence on a cost-benefit basis, along the lines of what Clausewitz and other compellence theorists have proposed as a valid starting point. It concludes with two case studies that use these concepts to perform a rudimentary cost-benefit compellence analysis of both Vietnam and the insurgency in Iraq. The intent is to identify issues of strategic significance from a decade of insurgent-style warfare in Vietnam and compare and contrast them with the current situation in Iraq.

### Notes

<sup>1</sup> Clausewitz, 87.

<sup>2</sup> Clausewitz, 75.

<sup>3</sup> Ehrhard, 40.

<sup>4</sup> Ehrhard, 23.

<sup>5</sup> Pape, 58.

<sup>6</sup> This is where the Pape model takes the easy way out, unfortunately. In a very reductionist approach, Pape admits of only one desired political outcome to any situation—that of “policy change” on the part of the target government. To use compellence effectively, one must have a clear idea of the exact desired outcome, since it will determine what resources will be committed to its accomplishment. Pape voluntarily eliminates his framework as a means for planning and implementing compellence. Ehrhard recognizes this, and rightly asserts that the sequence of Pape’s framework needs to be reversed. See Ehrhard, 16.

<sup>7</sup> Ehrhard, 40.

<sup>8</sup> Clausewitz, 90.

<sup>9</sup> Clausewitz, 90.

<sup>10</sup> Clausewitz, 91.

<sup>11</sup> Clausewitz, 91.

<sup>12</sup> Clausewitz, 91.

<sup>13</sup> Clausewitz, 92.

<sup>14</sup> Clausewitz, 93.

<sup>15</sup> Schelling, 5.

<sup>16</sup> Clausewitz, 93.

## Chapter 4

### The Cost-Benefit Model of Compellence

*In short, coercion is about manipulating an adversary's policy choices and decision making.*

—Byman and Waxman

#### Cost and Benefit in Compellence

Incorporating the basic concepts in the preceding chapters into a useful and usable framework for implementing and resisting compellence requires a guiding function or model; most theories of coercion and compellence use a basic cost-benefit model as their basis for describing whether compellence succeeds or fails.<sup>1</sup> Although there are shortfalls with this basic approach, it provides a necessary—and reasonable—starting point for examining the underlying concepts.

#### Compellence as a Cost-Benefit Tradeoff

On a rudimentary level, compellence can be viewed as a basic cost-benefit analysis on the part of an individual, or on the part of the leadership of an organization or country.<sup>2</sup> While there are shortfalls to this approach—and one should not be fooled into thinking there is a single, prescriptive formula for implementing compellence—the cost-benefit model is a useful framework for illustrating the important concepts.<sup>3</sup> The basic premise is that people and organizations are *inclined* to make value-maximizing choices.<sup>4</sup>

In its simplest form, cost-benefit analysis says that people and organizations will continue to do something (or not do something) as long as they perceive the benefits as outweighing the costs. It is important to recognize that people can—and do—project into the future, so the perception of future costs and benefits also plays a significant role in the decision making process.<sup>5</sup> If one were to depict this type of cost-benefit analysis graphically it would look like Figure 2 below (note the close resemblance to the Clausewitzian Model from Figure 1).



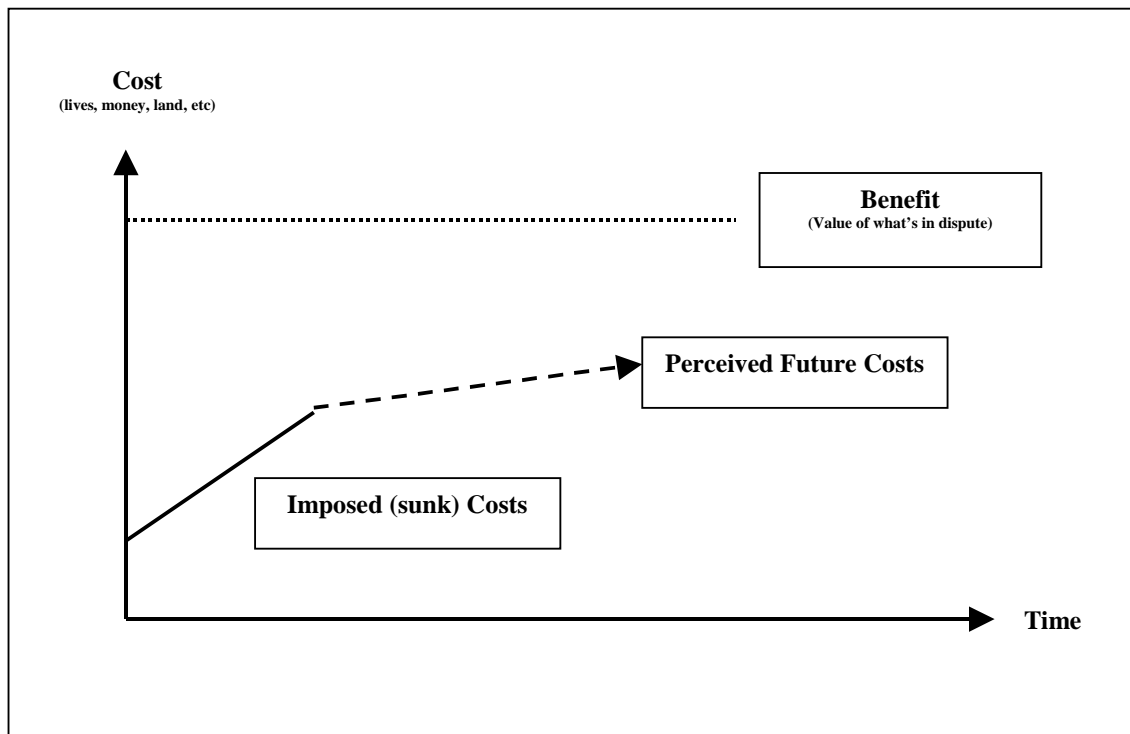


Figure 2. Basic Cost-Benefit Compellence Model.

### Figure 2. Basic Cost-Benefit Compellence Mode.

The assumption inherent in Figure 2 is that one's adversary will capitulate when the actual cost line exceeds the benefit line, or when it appears likely that the perceived future cost line will exceed it. The concept of perceived-future-cost as a factor that influences decision making is critical to the concept and application of compellence. In fact, it is the foundation of compellence, because, "It is *latent* violence that can influence someone's choice—violence that can still be withheld or inflicted...It is the expectation of *more* violence that gets the wanted behavior, if the power to hurt can get it all."<sup>6</sup> [emphasis in original]

The concept of perception and perceived cost also looms large in a recent book on the subject of coercion. According to Daniel Byman and Matthew Waxman, co-authors of the book *The Dynamics of Coercion: American Foreign Policy and the Limits of*

*Military Might*, there are four basic elements of coercive threats: benefits, costs, probabilities, and perceptions.<sup>7</sup> Three of these elements—benefits, costs, and perceptions—explicitly appear in the cost-benefit model of compellence shown in Figure 2. The fourth element, probabilities, is an implicit part of the decision-making output process that uses the other three elements as inputs.

If the influence of the “power to hurt” is the defining characteristic of compellence, it is reasonable to ask against whom should this power be directed, and how is it expected to result in the desired outcome. Truthfully, this is where most descriptions of coercion and compellence fall woefully short. One of the greatest dangers in describing compellence is viewing it as a static, one-sided activity. In truth, it is exceedingly dynamic, and any complete description of compellence must take into account its multi-faceted nature.<sup>8</sup>

### **Compellence is Interactive and Two-Sided**

At its very core, compellence is a two-way phenomenon. While one side is trying to compel the other to do its bidding, the other side is resisting and trying to counter-coerce the original side into quitting. It is more than just a sequential process of give-and-take, though. It is a simultaneous, parallel effort by all parties to influence the behavior and decision-making processes of their opponents.

At this point, it is useful to adopt some clarifying terminology to continue the discussion. Rather than calling the parties to compellence “Side A” and “Side B”, or some equally arbitrary scheme, it seems reasonable to call them the Compeller and the Resister. If there are multiple parties on each side—as is often the case with coalition warfare—one could lump them sub-optimally into the categories of Compelling coalition

and Resisting coalition. More usefully, although more difficult and time-consuming, one could and should create individual analyses for each party to the compellent action since each will have its own level of interests and its own decision-making structure. Regardless, in order to keep the explanation simple, this chapter will deal with a two-party case of compellence, with the initiating side being called the Compeller, and the side being compelled called the Resister.

This distinction is important because compellence is not a one-sided activity. It is misleading, if not downright dangerous, to view it as a static function. Compellence is interactive—each side will be trying to compel or coerce the other side: one to get what it wants, and the other to keep what it has.

So Figure 2 above is an incomplete model of compellence. It needs to include some consideration of the interactivity that is part of all personal and political interaction.

<sup>9</sup> In essence, Figure 2 is simply a one-dimensional depiction of the cost side of compellence. In addition to imposing costs on an adversary, the Compeller also can offer inducements and incentives to make the prospect of acquiescing more palatable or acceptable to the Resister. A combination of compellent incentives and costs—commonly known as “carrots and sticks”—may prove more effective than either a carrot or stick alone.<sup>10</sup>

These shortcomings notwithstanding, the basic model in Figure 2 serves as a solid starting point for a deeper examination of two vitally important compellence concepts: cost and benefit. Clearly, the two lines that stand out the most on the figure are the benefit line and the cost curve. Significantly, there are no categories attached to either one. They are generic expressions of what one side values, and what costs it has paid,

and expects to pay in the future, to benefit from keeping the object of value. These costs and objects can be almost anything: lives, land, equipment, money, national prestige—the list is limited only by the things people, groups, or states consider valuable.

### **Strategic Choices Shape Current and Future Costs**

Interestingly, while it appears that the Compeller and Resister independently determine the value of the political object at stake to themselves, it is both the Resister and the Compeller who determine what kinds of costs and how much cost ultimately will be levied among themselves during the compellence effort. For example, the Compeller may invade a neighboring country, kill civilians and military personnel alike, and loot treasure and equipment. This is a cost the Compeller has imposed on the Resister.

At this point, *the Resister's choice of strategy will affect the character and quantity of future costs*. A clear understanding of what is at stake, and how much the Resister is willing to sacrifice to retain it, is invaluable at this point—this is a critical nexus as the compellence campaign begins. It is the time when clear, deliberate thought is most needed because it will set the tone for the costs to follow. This is not to say that strategies cannot, or do not change. Vietnam is a perfect example. As the case study in Chapter Five will show, the United States pursued three different national strategies in Vietnam from 1961-1975.<sup>11</sup> Each change in strategy reflected a different value that the country placed on the benefit of a free and stable state of South Vietnam, and it also *affected the current and future cost curve while that strategy was in effect*.

## **Desert Shield/Desert Storm**

To illustrate the concept, consider the buildup and conduct of the first Iraq War in 1990 and 1991. Saddam Hussein's forces invaded Kuwait, occupying territory, killing Kuwaitis, and confiscating property, equipment, and money. These are all costs he imposed on the Kuwaitis.

At this point, the Kuwaitis could have thrown every last iota of their military and political resources into the fight in an attempt to dislodge the Iraqis and regain their territory. Realizing they were overmatched against a superior foe, they chose a different approach. While engaging in a guerrilla-style campaign of resistance, Kuwait pinned its hopes for liberation on the international community. Over the ensuing months, the United Nations Security Council passed nine resolutions regarding the Iraqi invasion of Kuwait. The tenth resolution was United Nations Security Council Resolution 678, which authorized the use of force to eject the Iraqis from Kuwait and restore the liberty and sovereignty of Kuwait.<sup>12</sup>

As the United States mobilized its military forces and worked to build a coalition to support Kuwait and oppose the Iraqis, it faced a number of strategic choices regarding the timing, method, and execution of a response to the invasion. Initially focused on preventing the Iraqis from moving south into Saudi Arabia, America scrambled to marshal sufficient military power to halt any further Iraqi incursions. After stabilizing the situation and confining the battlespace to Iraq and Kuwait, the political and military leaders of the United States took time to consider their strategy for ejecting Iraqi forces from Kuwait and restoring stability to the region.

The final strategy was built on a strong air campaign to weaken Iraqi forces and their command and control capability, followed by a rapid invasion of ground forces to defeat the Iraqi Army entirely.<sup>13</sup> This strategy set the tone for the future costs of the coalition and America. By choosing initially to use an air campaign that exposed far fewer military personnel to Iraqi attack in the opening days of the war—while also enabling the coalition to strike Iraqi forces and targets with relative impunity—America was able to impose high costs on Iraq from the outset of the war, while limiting its own casualties and costs.

### **Two-Sided Compellence**

As the preceding example shows, compellence—much like the politics that surrounds it—does not occur in a vacuum. It is a two-sided, interactive phenomenon, and one’s adversary undoubtedly will institute some level of counter-coercion, or counter-compellence in an effort to resist the initial compellence.<sup>14</sup> This interactivity is a well-known facet of warfare. Clausewitz clearly appreciated the interactive nature of warfare and cautioned his readers that the enemy would react to whatever was done to him, saying “The essential difference is that war is not an exercise of the will directed at inanimate matter.... In war, the will is directed at an animate object that *reacts*.”<sup>15</sup> [emphasis in original] Figure 3 below depicts an example of two-party compellence, and shows its interactive nature.

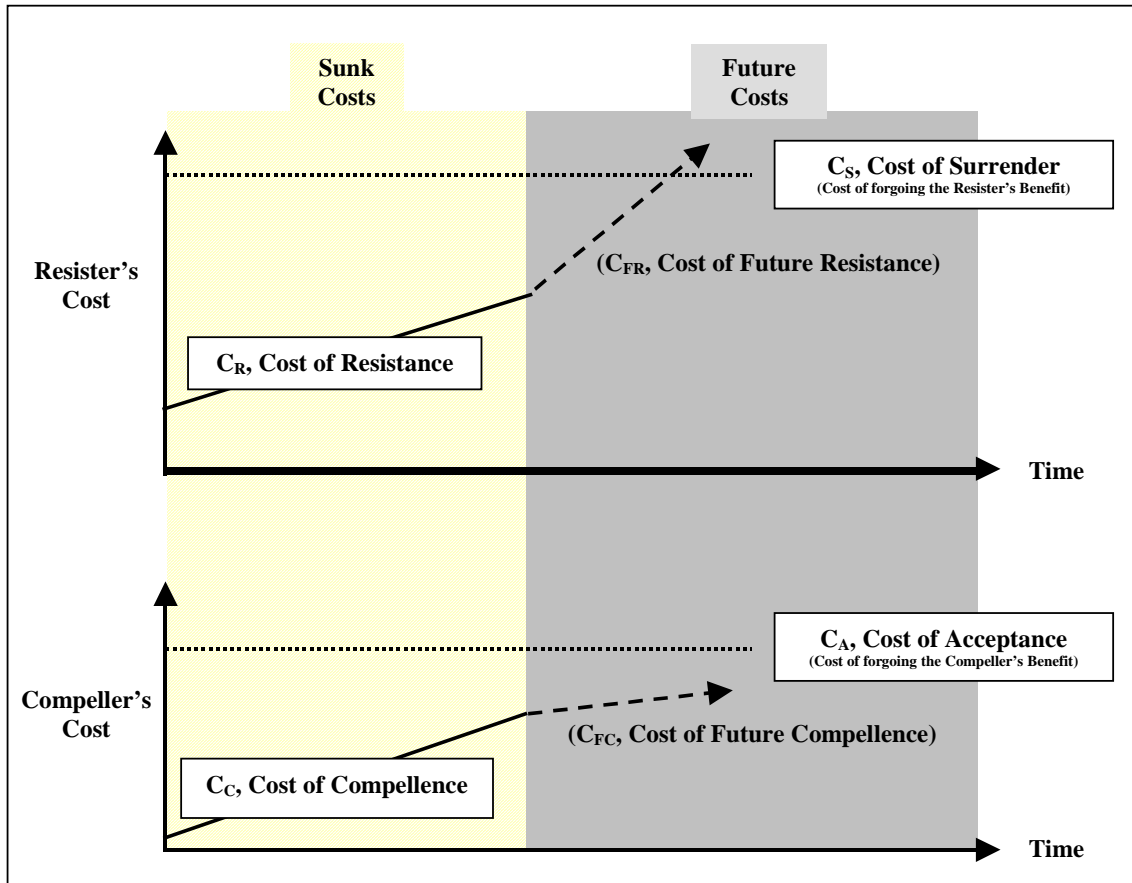


Figure 3. Interactive Cost-Benefit Compellence Model.

### Figure 3. Interactive Compellence Model

Figure 3 highlights several important concepts for compellence and insurgency—most of which are known and captured in the literature on political science, international relations, and military strategy. It is useful to reiterate these points here to show that this model of compellence and insurgency is consistent with reality as well as existing theory. Some of the important concepts include level of interest, probabilities for the future, and perceptions.

First and foremost, Figure 3 clearly shows that both sides will most likely have a different level of interest regarding the dispute—they will place a different value on what

they are fighting over. This is certainly not a new concept, but it is an important one because it determines not only how hard one will fight for something, but also how hard one's adversary may be willing to fight in return.<sup>16</sup>

At best, this is a relative indication, though—it really cannot be determined with empirical certainty beforehand.<sup>17</sup> As a starting point, a relative analysis of interest, or asymmetry of interest, between coercive adversaries is reasonable. Donald Nuechterlein's construct of the National Interest Matrix comprised of Survival, Vital, Major, and Peripheral interests comes to mind in terms of relative categories.<sup>18</sup> While a comparatively simple step at the outset, this is nevertheless a crucial top-level sanity check that must be made before any level of engagement, coercive or otherwise.

Therefore, as shown in Figure 3, a more complete expression of the concept of compellence includes the Compeller's level of interest as well as the Resister's level of interest. It also shows the Resister's effect on the Compeller, as well as the standard approach of the Compeller's effect on the Resister. This is consistent with reality. Actions on the political stage do not occur in a vacuum. If one state imposes costs on another to force its compliance, the other state will resist and impose costs of its own on the coercer. This is the interactivity that is found in all political discourse from subtle diplomacy to outright warfare. Ultimately, this interaction results in the four predicted outcomes for compellence shown in Table 1.



**Table 1. Predicted Outcomes of Compellence**

<u>Resister</u>	<u>Compeller</u>	<u>Outcome</u>
$C_R + C_{FR} > C_s$ and	$C_c + C_{FC} < C_A$	Compellence Succeeds
$C_R + C_{FR} < C_s$ and	$C_c + C_{FC} > C_A$	Compellence Fails
$C_R + C_{FR} < C_s$ and	$C_c + C_{FC} < C_A$	Compellence Continues
$C_R + C_{FR} > C_s$ and	$C_c + C_{FC} > C_A$	Unknown—unlikely to happen *
$C_R$ : Resister's sunk cost of resisting the compellence to change its action; $C_{FR}$ : Resister's perceived future cost of resisting compellence; $C_s$ : Resister's cost of surrendering to the compellence and forgoing its political benefit; $C_c$ : Compeller's cost of compelling the Resister to change its action; $C_{FC}$ : Compeller's perceived future cost of continuing compellence, and, $C_A$ : Compeller's cost of forgoing its own political benefit and accepting the Resister's action.		
* One side in a conflict should always reach its cost limit before the other—in the unlikely event that both reach their limits simultaneously, the issue would be a draw and most likely a failure for coercion since the situation would remain status quo.		

Table 1. Predicted Outcomes of Compellence.

In essence, Table 1 says that compellence will fail not only when the Resister's will is strong, but also when the Compeller's will is weak. Similarly, compellence may succeed when the Resister's will is weak, but not necessarily when the Compeller's will is strong. The effects of compellence rebound as strongly on the coercer as they do on the adversary, and they cannot be considered in isolation. The following three case studies briefly illustrate these concepts, and serve as examples of the first three outcomes of compellence listed in Table 1.

### **Cost-Benefit Case One, Compellence Succeeds: Kosovo**

NATO's Operation ALLIED FORCE in Kosovo is an extremely rich case study for compellence theory in general, and for the first type of compellence listed in Table 1 in particular. According to General Wesley Clark, Supreme Allied Commander, Europe

at that time, "Operation Allied Force was modern war—limited, carefully constrained in geography, scope, weaponry, and effects. Every measure of escalation was excruciatingly weighed."<sup>19</sup> In short, because of a growing appreciation among NATO member states of compellence and its possibilities, ALLIED FORCE was designed as a compellence campaign from the start.<sup>20</sup>

In terms of the cost-benefit construct, NATO's strategy was practically flawless. The alliance strove to increase costs rapidly against Serbia—a concept known as *escalation* dominance—while stringently controlling its own exposure and costs.<sup>21</sup> The strategy was a resounding success, despite early doubt among the media and others. NATO never lost a single life during the Air War over Serbia, and the United States lost only two aircraft in more than two months of combat operations.

Thus, in keeping its cost of compellence low, while rapidly increasing the cost of resistance to the Serbians, NATO pursued a highly successful Denial-based compellence campaign and achieved its desired political goals for Kosovo. Further evidence of the denial nature of this campaign is found in General Clark's own words, "To successfully 'compel,' I realized, the force applied must be much greater than we had been willing to commit at the time, must be intensified more rapidly, and must be directed at achieving significant military ends. Only when the targeted state realizes that its military efforts cannot succeed will it be 'compelled' to consider alternatives."<sup>22</sup>

### **Cost-Benefit Case Two, Compellence Fails: The Berlin Blockade**

The Soviet Blockade of Berlin began in late June, 1948 with a simple teletype bulletin: "The Transport Division of the Soviet Military Administration is compelled to halt all passenger and freight traffic to and from Berlin tomorrow at 0600 hours because

of technical difficulties...”<sup>23</sup> This announcement followed several months of maneuvering by the Soviets and the Western Allies—comprised of the United States, Great Britain, and France—over the status of the city of Berlin, deep in the Soviet occupation zone of Germany. It is clear that, despite agreements to the contrary, the Soviets considered Berlin as part of their occupation zone and they intended to control it exclusively.<sup>24</sup> President Truman’s response was swift and sure: “We stay in Berlin—period...[we] will have to deal with the situation as it develops...but the essential position is that we are in Berlin by terms of an agreement and that the Russians have no right to get us out by either direct or indirect pressure.”<sup>25</sup>

Thus began a yearlong campaign of punishment-based compellence by the Soviets and an even more tenacious counter-compellence effort by the Western Allies for control of Berlin. Early on, the outlook was bleak. As summer progressed into autumn, the Soviet blockade prevented fuel and coal from reaching the Western Sector of Berlin, assuring a cold and hungry winter for the western-controlled part of the city. The Soviets were sure that the Allies would concede and withdraw from Berlin before allowing its people to starve or freeze to death.<sup>26</sup>

Fortunately, the United States and Great Britain never had to make this choice because they were able to mitigate the costs of the Soviet Blockade through a massive airlift of food and supplies to the beleaguered city. Although the airlift started off slowly, and many thought it would never be able to supply the city’s basic needs, perseverance and planning eventually won out.<sup>27</sup> By the summer of 1949, a year after the airlift started, the Allies had delivered more than 1.5 million tons of coal to Berlin, and more than half a million tons of food.<sup>28</sup> All of this was accomplished at a cost of more than

225,000 flights into and out of Berlin, during which 39 Britons, 31 Americans, and 13 Germans lost their lives.<sup>29</sup> Nevertheless, by the summer of 1949 the Soviets realized their blockade could not isolate Berlin and they ended the standoff.

Ultimately, in the context of cost-benefit analysis, Soviet compellence failed because the Allies were able to control their own costs as they executed a successful counter-compellence strategy to resist the Soviets. Unwilling to face continuing costs imposed on them by the Allies, and realizing the improbability of their own victory, the Soviets ended their blockade and accepted the Allies' right to control the Western Sector of Berlin.<sup>30</sup>

### **Cost-Benefit Case Three, Compellence Continues: U.S. Sanctions against Cuba**

The final case study in this chapter starts in 1960, following the communist revolution in Cuba; it illustrates the third outcome of compellence found in Table 1. Following Castro's rise to power and the subsequent establishment of a communist government and seizure of U.S. property, the United States initiated economic sanctions against Cuba in July 1960.<sup>31</sup> Over the next forty-plus years, America would continue its efforts to strangle the Cuban economy in an attempt to get rid of the communist Castro government, ensure an early transition to a democratic government, and improve human rights conditions in Cuba.

The economic and social cost to Cuba of this embargo—long buffered by an infusion of cash and trade from the Soviet Union—became a staggering burden after the collapse of the Soviet Union.<sup>32</sup> From 1989 to 1992, Soviet imports of Cuban goods dropped from \$8.1 billion to \$2.3 billion, while the Gross Domestic Product of Cuba declined by more than 35%.<sup>33</sup> Across the board decreases in Cuban production seem to

indicate the decline in GDP may actually have been much higher, perhaps approaching 50%.<sup>34</sup>

The costs to America, on the other hand, have been negligible in comparison. Although there is a significant cost in lost opportunities for tourism, import, and export with Cuba, it is a small fraction of the overall economy of the United States.

Nevertheless, Castro continued to remain in power and defy the United States, and America continued to enforce its sanctions against Cuba. To the extent that both sides have been willing to continue to shoulder the costs of their policies, the costs of implementing and resisting compellence have not outweighed the benefits of continuing to pursue their national political objectives. Compellence continues, as predicted, and will do so until one side or the other determines the costs no longer outweigh the benefits.

### **Deeper Inside the Compellence Cost-Benefit Model**

While the interactive model of compellence shown in Figure 3 and its accompanying set of outcomes listed in Table 1 are fairly robust and descriptive, they still do not explain the mechanics of compellence and what is required to implement it and resist it successfully. In broad terms, however, they identify two avenues for affecting the outcome of compellence: increasing the cost of resistance to one's adversary and decreasing one's own cost of compellence. The first method is oriented toward achieving a compellent success, while the second method is concerned with avoiding a compellent failure. More will be said about this after examining the processes that create the conditions for coercive successes and failures.

Precisely defining what constitutes success and failure in compellence is important, but it says nothing about how to achieve success or avoid failure. The most

that one could extract from Figure 3 is the understanding that to succeed in coercion, a state must increase its adversary's cost of resistance while also controlling and minimizing its own costs. The real power of compellence lies in the trend lines that depict the various costs.

Creating the conditions for success and failure in compellence requires a method for manipulating and measuring the costs that are shown in Figure 3. While all of the costs are mutable to some degree, this analysis focuses strongly on those costs that are most sensitive to the application of airpower. Thus, while the adversary's cost of surrender can be lowered by offering concessions, this is not an area that is particularly amenable to the use of airpower. Therefore, the rest of the discussion centers on manipulating the costs of resistance and compellence, while leaving the exploration of the manipulation of the costs of surrender and acceptance for another time.

The debate over the effectiveness of airpower in compellence springs from the legitimate disagreement regarding how costs are imposed by the Compeller and perceived by the Resister. While Figure 3 describes these costs as simple, straight trend lines, even that description rightly would be labeled as misleading by some. The implication from the figure is that costs are linear—in essence, the presumption is that a known input should give a predictable, and knowable, output. This is not necessarily the case. For those who subscribe to less sequential and more cumulative strategies of force employment, the cost line actually might be a curve that represents the possible non-linear effects of applying compellent force against strategic, or vitally important, targets—or it might represent some other dramatic increase or decrease in costs due to strategic changes or operational successes or failures.

Unfortunately, there is no agreed-upon formula that describes how to manipulate the costs of resistance and compellence because of the myriad factors that play a lesser or greater role in every conflict. Assumptions can be made to simplify the problem, such as assuming the states in question are unitary entities that are controlled by rational actors, but that still does not reduce the variables to a manageable and fully quantifiable level. The intricacies, and quirks, of human and organizational behavior soon assert themselves and dash any hopes of deriving exact empirical formulae for the cost mechanisms of resistance and compellence.<sup>35</sup>

The most realistic approach may be heuristic—determining rules of thumb that describe the major determinants of the cost trend lines. A heuristic approach does not guarantee exact results. There may be small or unnoticed factors on one side that, unbeknownst to the other side, are the forcing function for the entire equation. Thus, while compellence not only might be non-linear, it also might be chaotic.

This highlights the inherent uncertainty in compellence—the pressures that produce a coercive success in one case might result in abysmal failure in another, similar, case. This admonition truly is more warning than waffling. As policymakers look to compellence to produce ever more precise effects, they must have an ever more precise understanding of the concepts that they expect to create those effects. The non-linear and chaotic nature of human, organizational, and bureaucratic behavior may frustrate even the most determined, and well-intentioned, efforts at achieving extremely precise coercive effects. Perhaps the best that can be done, using the heuristic approach, is to identify the most important contributors to the costs of resistance and compellence, and then determine which of those is susceptible *and* vulnerable to attack or influence.<sup>36</sup>

Beginning with the cost of resistance,  $C_R$ , the important determinants revolve around the interaction of the political, economic, and military costs that must be paid to resist the compellence of another state. For those who prefer a more visual construct:



$$\begin{matrix} C_{\text{Political}} \\ C_{\text{Economic}} \\ C_{\text{Military}} \end{matrix} \longrightarrow C_{\text{Resistance}}$$

In the interest of brevity, rather than listing all of the subcomponents of each determinant (which, if it could be done, truly would be required to develop a reasonable approximation of the  $C_R$  mechanism), consider a brief, and admittedly incomplete, selection. Politically, the most important costs seem to involve the costs to sovereign territory, the status quo of the ruling regime, the morale of the government and people, and the loss of life among military forces and the civilian population. Of these factors, the two that are most easily measured are the amount of sovereign territory lost, and the number of lives lost. Chapters Five and Six perform a cost-benefit analysis focusing on lives lost as a means for measuring costs in Vietnam and Iraq.

Examining “cost” from a compellence standpoint, one easily can see how airpower would be useful in controlling costs by limiting one’s own military casualties.<sup>37</sup> In fact, the United States did exactly that by adopting an airpower-centric approach in the European Theater during World War II up until the invasion of Normandy in 1944. The Air Offensive Operation in Europe resulted in more than 7,100 airmen killed in action from July 4, 1942 through June 5, 1944.<sup>38</sup>

From this statistic, it is readily apparent that the use of airpower was highly effective in limiting the number of military lives lost during the war, especially when the almost 2-year total of 7,100 air offensive battle deaths is compared with the more than 9,000 battle deaths that the United States Army averaged *every month* in the European Theater after the start of major ground combat in June, 1944.<sup>39</sup> Furthermore, when this is compared with the millions of lives lost between the Germans and the Russians who were

engaged in bloody ground combat on the Eastern Front during the same time, airpower is seen as an incredibly powerful tool for limiting and controlling national costs.

In addition to the political cost of lives lost, economically the most important costs seem to center around production and infrastructure. To the extent that airpower is used in a destructive role, the effects can be devastating. Even in non-destructive roles, airpower still can be important. The benchmark case for any universal theory of coercive airpower is the Berlin Airlift mentioned earlier in this chapter. To the extent that airlift served as a substitute line of supply that kept the cost of resistance from exceeding the cost of surrender for the Allies and the Germans in the Western Sector of Berlin, the Berlin Airlift was the hallmark of the flexibility of airpower in a counter-coercive role. This case in particular, underscores the importance of the results in Table 1, and knowing what makes compellence fail, not just what makes it succeed.

## **Summary**

From the preceding discussion, it is apparent that even the most rudimentary expressions of the cost mechanisms of compellence are hideously complex. The vast number of variables coupled with the wide array of instruments that can be used to affect them results in an imponderably large number of possible influencing factors. This is not to say that the application of compellence admits of no logic and is therefore hopelessly unpredictable—far from it. Rather, the salient point is that compellence can be a coarse or delicate task, depending on what is at stake, and how it is demanded.

Ultimately, the cost-benefit model is a powerful tool for depicting the basics of compellence, but it cannot predict how the opponent arrives at the decision to continue applying or resisting compellence when examining perceived future costs. This type of

analysis falls properly into the element of compellence that Byman and Waxman defined as “probabilities.”<sup>40</sup>

Nevertheless, one very important rule-of-thumb emerges from examining compellence as a cost-benefit analysis: cost control. The Compeller must impose costs on the Resister, while also keeping his own costs at an acceptable level. Similarly, the Resister will be attempting to impose counter-coercive costs on the Compeller as well. In this area, airpower has shown a marked ability to control a very important cost: the number of military lives lost during war or conflict. Ultimately, if the Compeller can control his own costs while increasing the Resister’s costs rapidly, known as *escalation dominance*, the chances for successful compellence seem to increase.<sup>41</sup>

### Notes

<sup>1</sup> Byman and Waxman, 10

<sup>2</sup> Byman and Waxman, 10.

<sup>3</sup> Byman and Waxman, 11.

<sup>4</sup> There are many exceptions or additions to this observation. Graham Allison’s *Essence of Decision* is an excellent primer for examining not only the rational, unitary, value-maximizing actor theory, but also for considering other decision-making models based upon organizational and even bureaucratic-political considerations. Even for those who cleave to the rational, unitary actor model of decision making, there are theories that dilute the concept of the primacy of value-maximizing decisions—such as Kahnemann and Tversky’s work on prospect theory. Furthermore, pure game theory and expected-utility theory assume that decision makers will ignore sunk costs—that is, they will ignore the lives, money, equipment, time, and prestige they’ve already invested in a given effort. As Robert Jervis notes in his chapter “Political Implications of Loss Aversion,” (page 26) this assumption is not necessarily valid. As Jervis notes, “sunk costs, furthermore, loomed large in secret deliberations.” Sunk costs are frequently honored, especially when decision makers are behind closed doors or in secret meetings. In reality, there are many different models and theories of decision making—there is no “one-size-fits-all” framework for describing, much less predicting, how people and organizations will make decisions. Coercion and compellence seek to create and maintain pressure within the adversary’s decision-making hierarchy to force a desired outcome—there are many paths to accomplishing this goal, but the underlying calculus seems to rely on finding something the adversary values and holding it at risk. This, in turn, requires a high level of information and knowledge about one’s adversary, both to

## Notes

uncover what should be held at risk as well as to understand what will cause undesirable outcomes or unintended consequences.

<sup>5</sup> Byman and Waxman, 11. “We too use a cost-benefit model as a starting point, because it focuses attention on four basic elements of coercive threats: benefits, costs, probabilities, and perceptions.”

<sup>6</sup> Schelling, 3.

<sup>7</sup> Byman and Waxman, 11

<sup>8</sup> Byman and Waxman, 30.

<sup>9</sup> Byman and Waxman, 30.

<sup>10</sup> Byman and Waxman, 9.

<sup>11</sup> Vietnam strategy under the Kennedy administration and through the early years of the Johnson administration was based on an “advisory” concept. In 1965, the Johnson administration shifted to a more conventional warfighting role as the collapse of South Vietnam appeared imminent. Finally, in 1969, as the Nixon administration came into office, the value of a stable and free South Vietnam had fallen, and the country was more concerned with national prestige. “Peace with honor” became the new mantra, and the strategy shifted accordingly to control the country’s costs in both lives and treasure.

<sup>12</sup> UNSCRs 660, 661, 664, 665, 666, 669, 670, 674, 677, and 678 were passed before DESERT STORM started.

<sup>13</sup> Powell, 473, 488.

<sup>14</sup> Byman and Waxman, 38.

<sup>15</sup> Clausewitz, 149.

<sup>16</sup> Byman and Waxman, 237. “The United States must, in this light, understand what it can and cannot affect: it can determine only the level of pain it inflicts, not the adversary’s willingness to accept that pain.”

<sup>17</sup> Byman and Waxman, 233: “These challenges suggest not only that a rote formula for successful coercion is unattainable, but that belief in its existence can spawn misguided policy.” Dr Forrest Morgan emphasized this point clearly in a recent coercion working group sponsored by the Air Force’s “Checkmate” strategy division and the Navy’s counterpart organization “Deep Blue.” It would be dangerous to say that any side knows with certainty exactly how much blood, treasure, land, etc. it is willing to commit at the outset of coercion. Even if it were known, this would be an incredibly valuable piece of information for the other side to have, because then it would know exactly how much cost it needed to impose to make the first side quit.

<sup>18</sup> Nuechterlein, 98.

<sup>19</sup> Clark, xxiv

<sup>20</sup> Clark, 5. “There was another strand of thought that had crept into the thinking of some of the European members of NATO, from work done in the United States in game theory. This work aimed to take the influence of the military beyond ‘deterrence’...and into something called ‘compellence,’ which was to cause someone to act in a certain way.”

<sup>21</sup> Clark, 6.

<sup>22</sup> Clark, 6.

<sup>23</sup> Haydock, 140.

## Notes

- <sup>24</sup> Haydock, 135-136.
- <sup>25</sup> Haydock, 152.
- <sup>26</sup> Haydock, 145.
- <sup>27</sup> Haydock, 146.
- <sup>28</sup> Miller, 108.
- <sup>29</sup> Miller, 109.
- <sup>30</sup> Haydock, 264. “The options available to the Soviet Union were dwindling, and the Western allies were tightening the counterblockade that had been imposed shortly after the Soviets began their transport restrictions.”
- <sup>31</sup> Preeg, 11.
- <sup>32</sup> Preeg, 12.
- <sup>33</sup> Preeg, 23.
- <sup>34</sup> Preeg, 23.
- <sup>35</sup> Byman and Waxman, 44.
- <sup>36</sup> Byman and Waxman, 46.
- <sup>37</sup> Byman, Waxman, and Larson, 130.
- <sup>38</sup> *Army Battle Casualties*, 92. The U.S. lost 7,143 airmen in Europe from 4 Jul 1942 – 5 June 1944. In the month of June 1944 alone, the U.S. Army lost 9,299 troops in Europe (see page 106).
- <sup>39</sup> *Army Battle Casualties*, 106.
- <sup>40</sup> Byman and Waxman, 11.
- <sup>41</sup> Byman and Waxman, 30.

## **Chapter 5**

### **Case Study: Vietnam**

Examining the levels of relative interest and importance between the competing sides is a critical function when analyzing the adversary's intentions and capabilities during a coercive campaign. Significantly—and contrary to the straight lines depicted earlier in Figures 2 and 3—the level of interest or importance is not necessarily static. The American experience in Vietnam is a classic example of a shifting national interest—such a shift affects how much effort one puts into a campaign and what costs one is willing to bear in pursuit of the national interest benefit.<sup>1</sup>

#### **National Interest, Policy, and Strategy in Vietnam**

Vietnam is an illustrative case because there was only one national policy during the war for the North Vietnamese, while there were three distinct United States national policies during that time. As far as the North Vietnamese national interest, it is readily apparent to all scholars of the Vietnam War that the Vietnamese Communists were “fighting a total war with the ultimate aim of uniting both North and South Vietnam under Hanoi's rule and evicting all foreign forces.”<sup>2</sup>

In contrast, the United States was fighting a more limited war for more limited—although still important—ends. During the first policy period, spanning the time from our initial involvement in the 1950s until 1965, the U.S. national interest was decidedly

limited in both scope and application. Under President Kennedy and early in President Johnson's tenure, the United States policy was essentially one of assistance and advice. The national interest lay in maintaining the bipolar balance of Cold War power through a stable, secure, and free South Vietnam that provided a counterweight against communist North Vietnam.<sup>3</sup>

After the Gulf of Tonkin incident in 1964, and moving into 1965, the United States was deeply concerned that the war was not going well, and South Vietnam would fall to the North. The national interest continued to rest in preventing the spread of Communism across the Indo-China peninsula, only it now seemed to require a more active U.S. combat role.<sup>4</sup> The country (and its leadership) was willing to endure more in the way of budget outlays and casualties to achieve this goal.

The final policy shift occurred in the 1968 and 1969 timeframe. Costs had escalated dramatically, especially in terms of lives lost, and the country was no longer willing to endure them. The new national interest lay in achieving "peace with honor", and in assisting South Vietnam to assume "the primary responsibility of providing the manpower for its defense."<sup>5</sup>

### **Cost-Benefit Analysis in Vietnam**

Two of the most obvious costs in any conflict are treasure and blood. To the extent that a nation or a group still has the will or ability to spend more money on the fight or send more military personnel into it, there always exists the possibility that the fight will go on.

The actual monetary outlays of the Department of Defense during the Vietnam War era provide an excellent starting point for examining the costs that the United States

paid to continue the fight during this time. One should note that these outlays are for the entire Department of Defense, and not simply for the Vietnam War itself. Chart 1 below graphs these outlays on a year-to-year basis in constant Fiscal Year 2005 dollars.

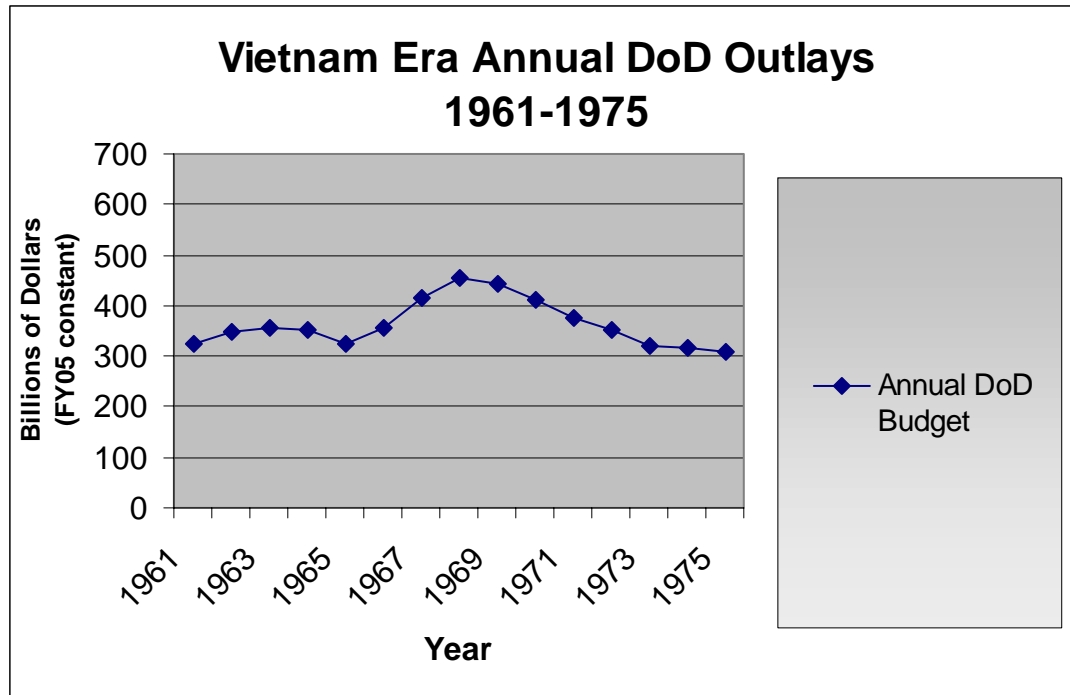


Chart 1. Vietnam Era Annual DoD Outlays, 1961-1975.

Budget data: [http://www.defenselink.mil/comptroller/defbudget/fy2005/fy2005\\_greenbook.pdf](http://www.defenselink.mil/comptroller/defbudget/fy2005/fy2005_greenbook.pdf)  
Accessed on 20 April 2005

### **Chart 1. Vietnam Era Annual DoD Outlays, 1961-1975.**

Not surprisingly, the outlays for the Department of Defense increased during the height of the Vietnam War, and tapered off again near the end of the war. Going to war can be expensive, and usually is. Perhaps the most that can be extracted from Chart 1 is that large-scale warfare, especially large-scale ground combat, can be extremely expensive. The largest Department of Defense budgets during this era came during the times of the heaviest ground combat engagement from 1966 thru 1971.



The *effect of strategy on cost* is the relevant point in Chart 1. As stated earlier, the United States changed its strategy in Vietnam in 1965 and again after the new administration took office in 1969. The corresponding increase and decrease in monetary outlays during these periods reflects these strategic changes.

In addition to the year-to-year cost of defense spending during the Vietnam War, the Department of Defense outlays during this time also can be viewed as a larger aggregate, revealing a more constant long-term outlook of defense spending. By adding each of the preceding years' budgets together, and then viewing them cumulatively over the long term, the budget outlays appear fairly constant, as Chart 2 shows below.

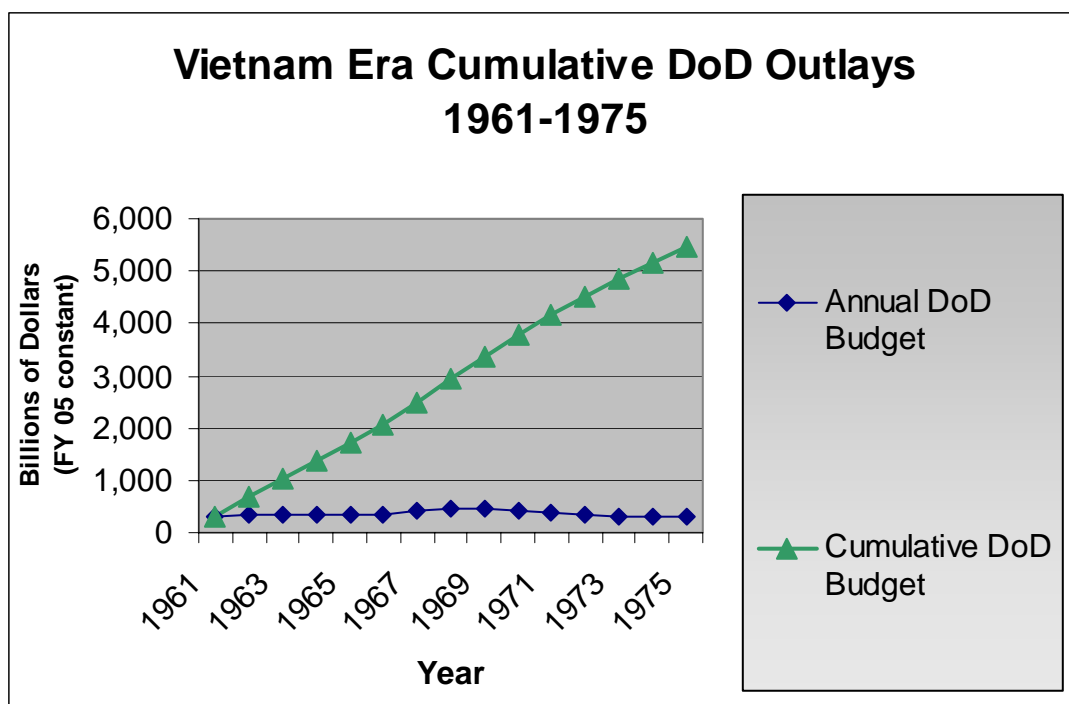


Chart 2. Vietnam Era Cumulative DoD Outlays, 1961-1975.

Budget data: [http://www.defenselink.mil/comptroller/defbudget/fy2005/fy2005\\_greenbook.pdf](http://www.defenselink.mil/comptroller/defbudget/fy2005/fy2005_greenbook.pdf)  
Accessed on 20 April 2005

**Chart 2. Vietnam Era Cumulative DoD Outlays, 1961-1975.**

Although domestic budgetary pressures were an issue during the Vietnam War, there are no dramatic swings in Chart 1 or Chart 2 to indicate that defense spending might have been a cost that was too high for the country to bear. Quite the opposite, in fact—the country’s defense spending increased at a fairly constant rate from 1961 through 1975.

Such was not the case when one examines the cost that the United States paid in lives lost during the Vietnam War, however; those graphs show much more dramatic changes than do the monetary graphs. Chart 3 shows the number of U.S. military deaths in the Vietnam War, both hostile and non-hostile, between 1961 and 1975.

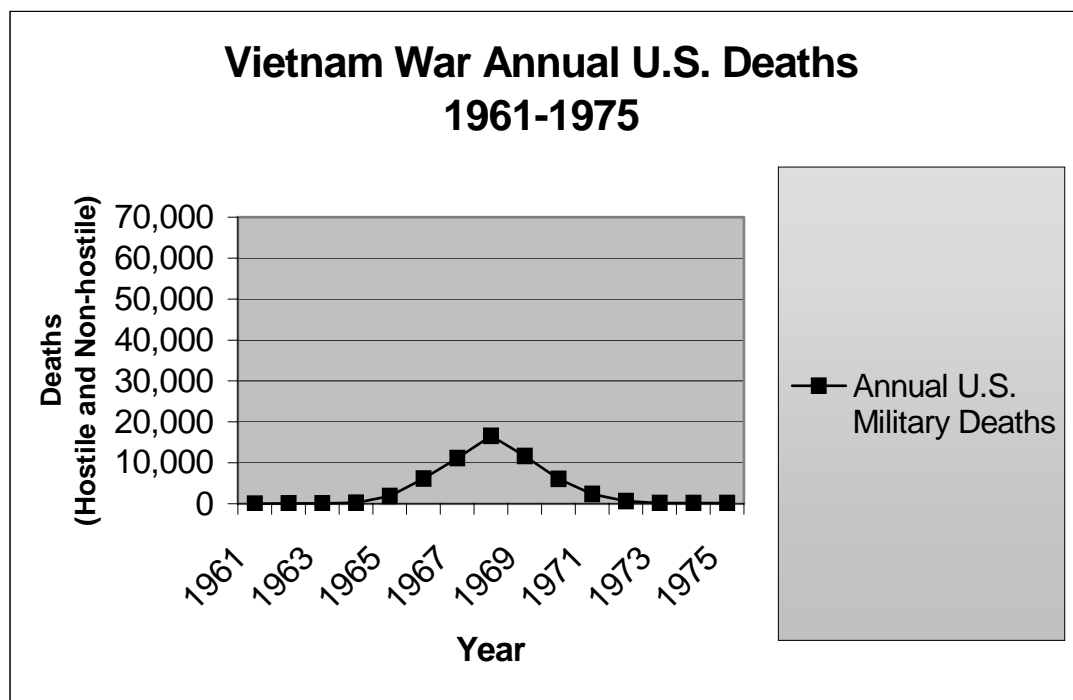


Chart 3. Vietnam War Annual U.S. Deaths, 1961-1975.

Casualty data: [www.archives.gov/research\\_room/research\\_topics/vietnam\\_war\\_casualty\\_lists/statistics.html#year](http://www.archives.gov/research_room/research_topics/vietnam_war_casualty_lists/statistics.html#year)  
Accessed on 12 April 2005

**Chart 3. Vietnam War Annual U.S. Deaths, 1961-1975.**

As students of history know already, the years from 1965-1970 were particularly difficult for the United States military in terms of the number of personnel who were killed in action or who died from non-hostile causes in Vietnam. The strategic significance of these fatalities becomes even more apparent when the *cumulative* deaths for this time period are examined, as shown in Chart 4 below

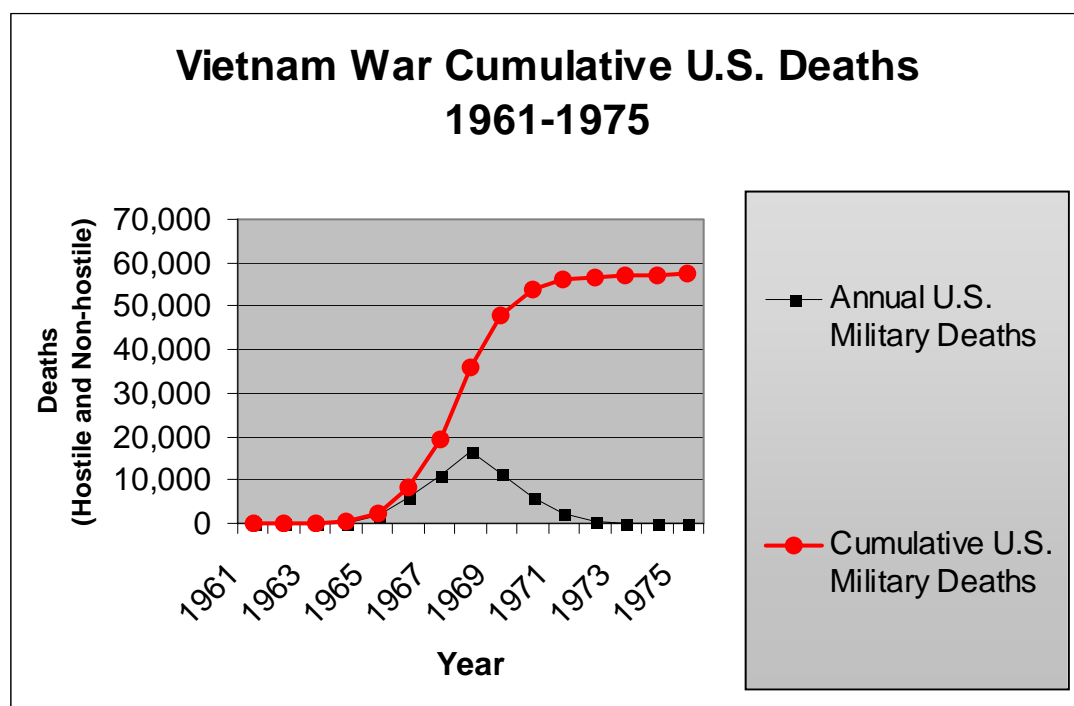


Chart 4. Vietnam War Cumulative U.S. Deaths, 1961-1975.

Casualty data: [www.archives.gov/research\\_room/research\\_topics/vietnam\\_war\\_casualty\\_lists/statistics.html#year](http://www.archives.gov/research_room/research_topics/vietnam_war_casualty_lists/statistics.html#year)  
Accessed on 12 April 2005

#### Chart 4. Vietnam War Cumulative U.S. Deaths, 1961-1975.

The most relevant—and immediately striking—feature of Chart 4 is the shape of the curve that depicts the cumulative number of United States military lives lost during the heart of the Vietnam War. Earlier, Chart 2 showed that cumulative defense spending

from 1961 through 1975 changed at an essentially constant rate. What did not change at a constant rate over the same time was the number of lives lost in Vietnam.

As Chart 4 clearly depicts, there are two dramatic inflection points that are attributable directly to a change in U.S. national policy *and* strategy during this time.<sup>6</sup> It is no accident that the first inflection point on the cumulative-lives-lost curve occurred in 1966—rather it is a very visible reflection of a strategic change. After inserting large numbers of ground troops in 1965 and continuing to ramp up the number of personnel in Vietnam over the next several years, the United States was involved in an all-out ground war in Vietnam. This directly corresponded to a new American strategy in Vietnam, where the United States would take an active combat role.<sup>7</sup>

The next inflection point came around 1970, and it also reflected a national strategic change. At this point, the rate of lives lost began decreasing as the United States pulled away from major ground combat and sought to turn the war over to the South Vietnamese.<sup>8</sup>

What is readily obvious from this analysis, but nevertheless quite important, is the interdependency among strategy, benefits, and costs. Clearly, the strategy one adopts in pursuit of the national-interest benefit will affect the costs that will have to be paid to achieve it. This approach is borne out in the cost-benefit analysis model. On the following page, Figure 4 shows an overlay of the Vietnam costs presented in Chart 4 as they are superimposed on the interactive compellence framework model to reflect both shifting costs and the shifting national interest benefit.

Decision makers and strategists alike should consider how their choices in the ends-ways-means construct of national policy create *pressure points* for our adversaries

and ourselves as we pursue our national interests.<sup>9</sup> By using a strategy in Vietnam that relied on large numbers of ground forces to fight a largely ephemeral insurgent threat, the United States exposed those same forces to enemy attack. As history shows, the country—and its decision makers—decided the cost in American lives outweighed the potential national interest, and subsequently redefined both the national interest and the strategy employed to achieve it.

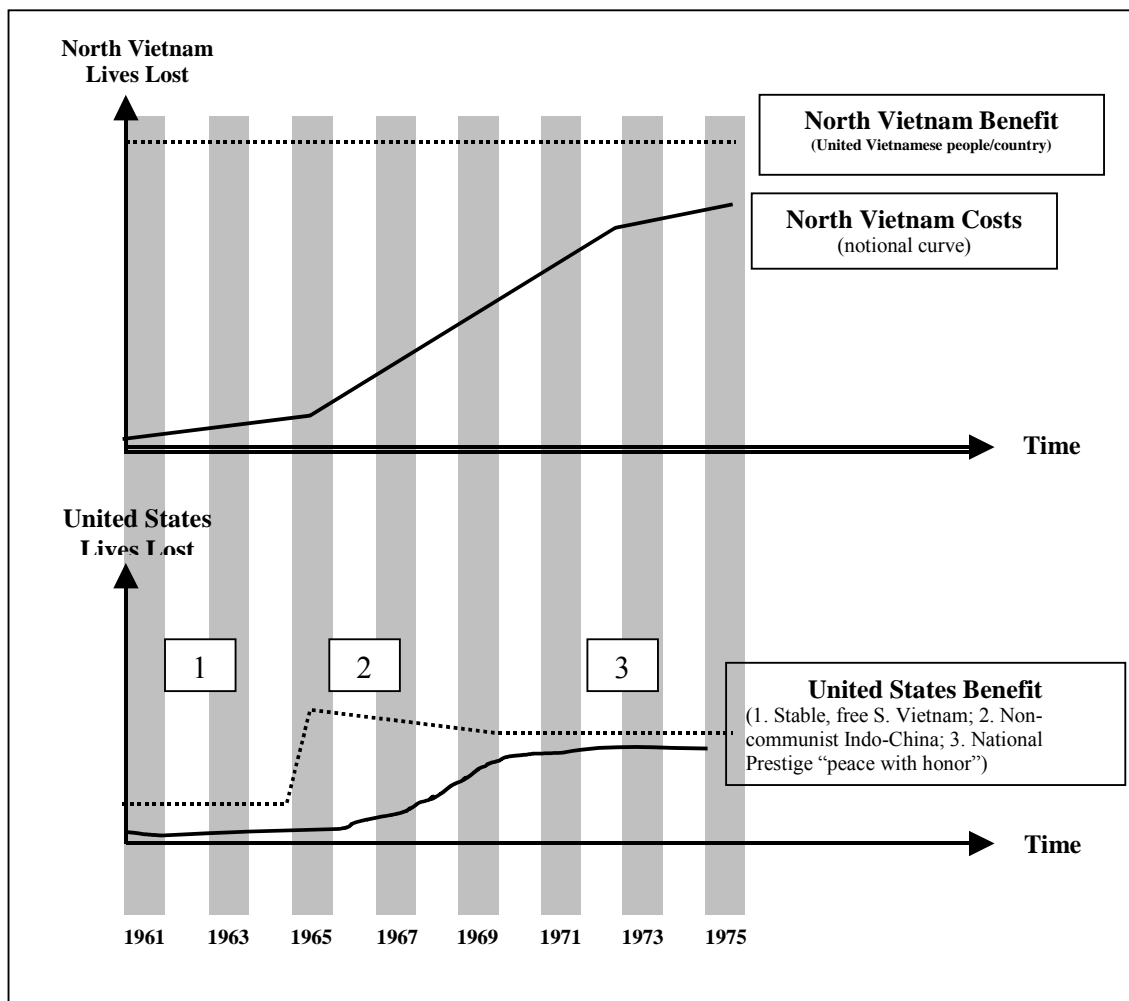


Figure 4. Vietnam Notional Cost-Benefit Compellence Model.

**Figure 4. Vietnam Notional Cost-Benefit Compellence Model**

Significantly, although the United States inflicted far higher numbers of casualties and deaths on the North Vietnamese, Ho Chi Minh continued to fight until America quit. His government and people considered the value of a united Vietnam to be worth the cost. This reflects the centuries-old military and political maxim of “knowing your enemy”—from Sun Tzu to Clausewitz to modern times, the importance of knowing why your adversaries are fighting and how long and hard they are willing to fight is a crucial element of the strategic analysis.<sup>10</sup>

### Notes

<sup>1</sup> Robert Jervis makes an interesting case for Prospect Theory as a descriptor of national security decision making: “More generally, prospect theory leads us to expect people to persevere in losing ventures much longer than standard rationality would lead one to expect. Vietnam is an obvious case...”, 26.

<sup>2</sup> Krepinevich, *Iraq & Vietnam*, 5.

<sup>3</sup> Gaddis, 209.

<sup>4</sup> Gaddis, 247.

<sup>5</sup> Gaddis, 298. This comes from the third proposition outlined in the Nixon Doctrine.

<sup>6</sup> Gaddis would disagree—he believes U.S. strategy was constant under Kennedy and Johnson with the strategic application of the “flexible response” concept. Perhaps this is true at the grand strategic level, but at the level of useful strategy—that is, strategy as the actually *way* in which *means* are employed to achieve *ends*, Gaddis himself notes the major change in “calibration” between Kennedy and Johnson. On page 246, Gaddis notes that “calibration” under Kennedy was aimed at transforming South Vietnam into a “sufficiently self-reliant anti-communist bastion so that no direct commitment of United States forces would be necessary.” On the next page, he notes that “The resulting Viet Cong gains led the Johnson administration by the end of 1964 to approve what Kennedy had rejected—a combat role for the United States in Vietnam.” Clearly, this is a change not only in the quantity and type of *means* used to prosecute the war, but also in the *way* (i.e. strategy) that the war was fought.

<sup>7</sup> Gaddis, 247.

<sup>8</sup> Gaddis, 299.

<sup>9</sup> Byman and Waxman, 30. “...successful coercion requires discovering and threatening an adversary’s *pressure points*. Pressure points are much more than those areas sensitive to the adversary—they are also areas the adversary cannot impenetrably guard.”

<sup>10</sup> Byman and Waxman, “Ho Chi Minh’s often-quoted statement that the North Vietnamese could endure ten times as many casualties as the United States and nevertheless triumph strikes at the essence of many failed coercive strategies: a misunderstanding of the adversary’s willingness to accept punishment.” Page 237.

## **Chapter 6**

### **Case Study: Insurgency, Iraq, and Airpower**

This chapter further examines insurgency as a form of compellence and analyzes the role of airpower as a compellent—and counter-compellent—instrument in the fight against insurgent activity. After presenting some definitions and theories on coercion and insurgency, the following sections progress into the realm of counterinsurgency (also known as COIN), concluding with some observations and recommendations from a recent Coercion Working Group regarding current and future airpower employment in the COIN environment.<sup>1</sup>

#### **Insurgency is Compellence**

Coercion and insurgency are inextricably linked—in fact, insurgency is a form of compellence. The truth of this statement is self-evident simply by looking at the definitions of each. Compellence is the use of influence to create a desirable outcome, or to prevent an undesirable outcome.<sup>2</sup> In the words of Thomas Schelling, “...it is not the pain and damage itself but its influence on somebody’s behavior that matters.” In a similar vein, insurgency is a political tool that uses violence to affect or influence behavior—its essence is “protracted political violence.”<sup>3</sup> This description, and many others like it, forms the basis for the definition of insurgency used in this paper. In short, insurgency is the use—or threat—of violence by sub-national or unofficial organizations

to influence the behavior of people and nations to achieve desired political goals. In its application, it closely parallels Schelling's concept of "compellence."<sup>4</sup>

### **The Insurgency in Iraq**

Armed with some basic definitions from the earlier section, the insurgency in Iraq can be examined in terms of a compellence campaign by the insurgents against the United States and its allies. The insurgent effort began in earnest in April 2004 and has continued ever since with kidnappings, suicide bombings, and attacks on U.S., coalition, and Iraqi military, police, and government forces. To understand the insurgency, one must understand the major stakeholders in Iraq, and what their desired outcomes are for the war and insurgency in Iraq.

There are at least three major polities in Iraq: 1) the U.S. and its allies; 2) the general Iraqi population, and; 3) the insurgents. Each of these groups has its own goals and each of these needs to be understood in terms of the political benefit or outcome that each is trying to achieve. This, in turn, will affect how long and hard each is willing to fight to achieve their desired ends.

For its part, the goal of the United States and its allies is to create a stable, free, and democratic Iraqi state that neither supports nor exports terrorism, most notably in the form of radical Islamism.<sup>5</sup> The Iraqi people, presumably, want security and good governance in their country, free of the reality or appearance of foreign occupation or influence, either from America or the insurgents.<sup>6</sup> Finally, the insurgents want an unstable and non-secure Iraq, because it facilitates their own activities and allows them to continue the fight against the United States and its allies in an attempt to drive them out of Iraq.<sup>7</sup>



Using an approach similar to the Vietnam case study, a relevant question to ask is whether an analysis of American casualties in Iraq reveals any comparable inflection points—especially since the beginning of the insurgency in April, 2004.<sup>8</sup> Chart 5 is a graph of two years of U.S. military fatalities—both hostile and non-hostile—since the beginning of the Iraq War in March 2003 through March 2005.

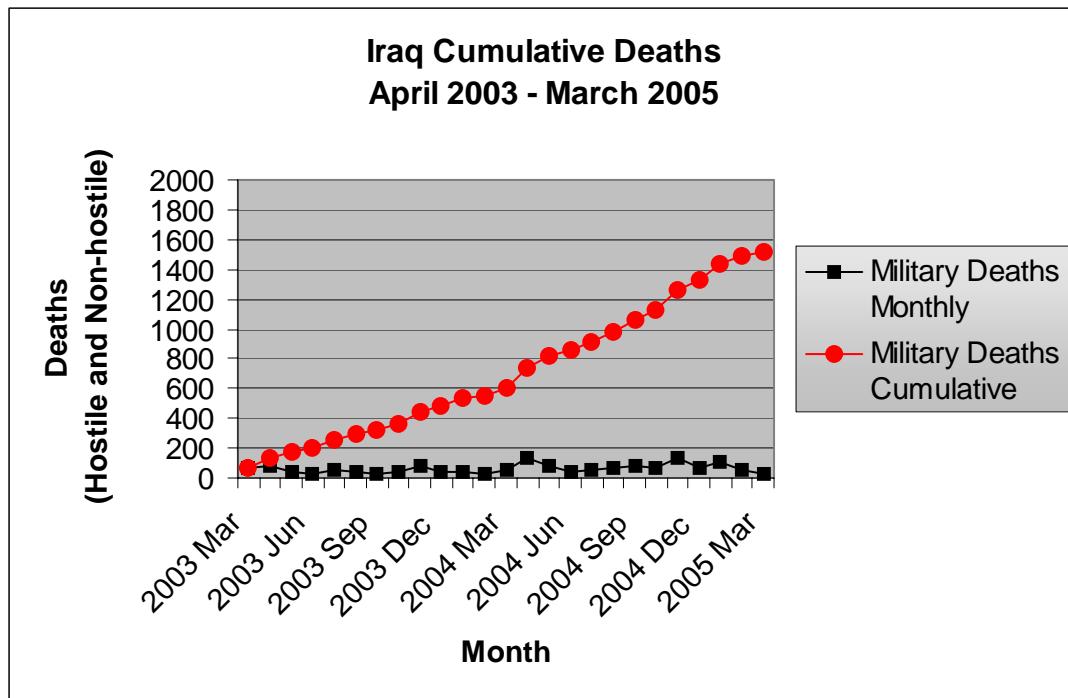


Chart 5. Iraq Cumulative Costs, April 2003–March 2005.

Casualty data: <http://web1.whs.osd.mil/MMID/CASUALTY/OIF-Total-by-month.pdf>  
Source accessed on 12 April 2005

### Chart 5. Iraq Cumulative Costs, April 2003–March 2005.

As expected, Chart 5 shows a sharp increase in the number of fatalities in April of 2004—when the insurgency began in earnest—but then the curve appears to resume its former slope until the large push in November 2004 when the United States stormed Fallujah. The curve again flattens out and approaches its former slope until January 2005, when the Iraqi elections occurred. American casualties have dropped off since

then, although it is still far too early to determine if this decrease will continue, and if there is indeed an inflection point indicating a decreasing trend at this time.

Regardless, one can see quickly that this casualty pattern does not resemble the Vietnam pattern at all. While America and her families have suffered greatly from the loss of every service man and woman who has died in Iraq, the pattern does not exhibit the dramatic escalation seen during the height of ground combat during the Vietnam War.

### **Perceptions and Probabilities**

American costs, benefits, perceptions, and probabilities are only one set of factors in an incredibly complex equation, though. They are the factors that determine whether or not America stays the course—and for how long—they do not determine whether or not the United States and its allies will succeed in Iraq. To gain an appreciation of this, one must examine the perceptions and probabilities of two other major parties in the Iraq conflict: the Iraqi population, and the insurgents. The ability for America to stay the course in Iraq depends as much on the willingness of the Iraqi population to support the war and its efforts as it does for America and its allies to support the war effort.

It is a well-known axiom of counterinsurgency that the center of gravity of the COIN effort is the will of the people in the country where the insurgency is taking place.<sup>9</sup> The activities of the insurgents are focused as much on the local population as they are on the military forces they are fighting. The gold standard for an insurgency is to have the local population actively supporting their efforts. This is not a necessity for a successful insurgency, however. At the very minimum, the insurgents require only a population that does not actively oppose them—that is, a passive population that does not give information or intelligence to the counterinsurgent forces. In the words of Andrew

Krepinevich, “It is important to note that, owing to the absence of personal security, the vast majority of the population typically remains uncommitted, providing support only when coerced, or when a clear winner emerges.”<sup>10</sup>

Therefore, providing security for the local population is an absolute precondition for success in Iraq or any counterinsurgency effort. In fact, Security is one of the four primary pillars for post-conflict reconstruction in any failed or failing state, according to the work of the Post-Conflict Reconstruction Project at the Center for Strategic and International Studies in Washington, D.C.<sup>11</sup> An unstable, non-secure environment significantly facilitates the insurgents’ work—and they know this, as the pattern of their attacks consistently has shown.

In an analysis of insurgent attacks from September 2003 through October 2004, Anthony Cordesman—Senior Fellow and holder of the Arleigh Burke Chair in Strategy at the Center for Strategic and International Studies—shows the magnitude of attacks not only on American and coalition forces, but also on government and Iraqi security forces. During this time, insurgents staged 3,227 attacks on coalition forces, killing 451 personnel.<sup>12</sup> Throughout this same period, insurgents also committed 209 attacks against Iraqi Police, killing 480 personnel, and 58 attacks against the Iraqi Civil Defense Corps, killing another 191 personnel.<sup>13</sup>

Significantly, the insurgents also may be their own worst enemy among the general Iraqi population: while they have been killing and wounding coalition and Iraqi security forces, they have also been indiscriminately killing Iraqi civilians, to the tune of 1,981 civilians killed in 180 attacks during this timeframe.<sup>14</sup> As the massive voter

turnout in January 2005 may indicate, the average Iraqi seems to want good governance in Iraq to provide security and the other elements of stable society within the country.<sup>15</sup>

American and coalition efforts must continue to focus on showing Iraqis that the coalition is committed to their safety and security, not only through building the Iraqi Security Forces and confronting the insurgents, but also through the measured and controlled use of violence that minimizes collateral damage among the general Iraqi populace. As the U.S. military searches for more effective ways to employ its airpower assets in the urban environment, this is a crucial area for further analysis and development.

A tactical-level recommendation from the Checkmate Coercion Working Group was that the U.S. Air Force and U.S. Navy should investigate the feasibility of developing a precise, extremely low-yield weapon for use in urban combat.<sup>16</sup> The Air Force already is making progress in this area with the small-diameter bomb program, but at 250 pounds, it still packs a very large punch in a densely populated urban area. The requirement for a precise, low-yield weapon must be clearly and quickly articulated.<sup>17</sup> Something in the class of a 50-pound bomb would pack a punch similar to the AC-130's 105-millimeter howitzer round, yet still have low collateral damage against nearby structures and people.

The requirement for low collateral damage among the host-nation's people and property during weapons employment cannot be overstated: it plays directly into the Iraqi peoples' perceptions in their cost-benefit analysis. Whenever the coalition accidentally kills Iraqi civilians or destroys their property, even in the pursuit of insurgent killers and criminals, it dilutes the legitimacy and effectiveness of the coalition

counterinsurgent efforts. The unintended, third-party outcome of this type of force application is a shift in the perceptions of the Iraqi people away from supporting the coalition.<sup>18</sup>

Also critically important in the fight against insurgency—and terrorism as well—is the necessity of pursuing the right people. Admittedly, this is an intelligence-driven event. Good intelligence on identities, locations, and travel routes of principal players in the insurgency is worth its weight in gold. While a daunting task, the intelligence and operations communities do not need to start from scratch with each insurgent or terrorist organization: there are ways to focus the search.

Social Network Analysis is a field that promises to help narrow the field in the search for value and vulnerability within an insurgency or terrorist organization.<sup>19</sup> By using nodal analysis to examine what is already known about existing organizations, critical linkages can be exposed within the group. These linkages then provide the opportunity for further reconnaissance and surveillance, or for more targeted, forceful attacks.<sup>20</sup>

At the operational level of war, the Strategy Cell within the Combined Air Operations Center and within the J-5 of regional combatant commands should examine the utility of Social Network Analysis as a method to focus limited intelligence and operational assets on those target areas that would have the greatest benefit in disrupting the linkages within an insurgent or terrorist organization. The United Kingdom's Royal Air Force is examining methods for operationally using social network analysis in the Global War on Terror, and the Coercion Working Group recommended that the Combined Air Operations Center should coordinate and work with the RAF in this effort.

Finally, at the strategic level of war, there needs to be further examination and emphasis on knowledge of the adversary. The coalition and the United States do not know enough about the nature and identity of the insurgents to engage them effectively. This is a first-order failure that is well documented in the burgeoning literature on the war in Iraq.<sup>21</sup> We simply must devote more resources to analyzing the nature of the insurgency and the identity of the insurgents—at the same time, we should have a strategic-level perception management campaign that focuses on the good news successes that the coalition is bringing to Iraq in establishing good governance and a functioning, stable society.

### Notes

<sup>1</sup> I had the pleasuring of chairing the Coercion Working Group that met on 23 –24 Mar 2005 during the joint Checkmate/Deep Blue Strategy Conference. It consisted of Air Force, Navy, Royal Air Force, and civilian professionals from Strike, ISR, IO, Mobility, and other cross-functional backgrounds. Special thanks go to Drs. Karl Mueller and Forrest Morgan of RAND Corporation, Dr Rick Andres of the US Air Force School of Advanced Air and Space Studies, Wing Commander Harry Kemsley of the United Kingdom’s Royal Air Force for his briefing on Social Network Analysis, Major Wayne Straw for his briefing on Airpower in Iraq, and to Major Yvette Quitno and Mr. Andrew Serafin of the Air Staff’s Checkmate Strategy Division for their tireless work.

<sup>2</sup> Schelling, 3. “...it is not the pain and damage itself but its influence on somebody’s behavior that matters. It is the expectation of *more* violence that gets the wanted behavior, if the power to hurt can get it at all.

<sup>3</sup> Metz, 1.

<sup>4</sup> Schelling, 79-80. “Compellence is *inducing* his withdrawal, or his acquiescence, or his collaboration by an action that threatens to hurt, often one that could not forcibly accomplish its aim but that, nevertheless, can hurt enough to induce compliance.”

<sup>5</sup> Krepinevich, Iraq & Vietnam, 6.

<sup>6</sup> Krepinevich, Iraq & Vietnam, 5.

<sup>7</sup> Cordesman, 6.

<sup>8</sup> Keeping in mind that there are many different costs that can be tracked and analyzed to include budgetary outlays, civilian non-combatant deaths, collateral damage effects, public opinion, etc. A comprehensive cost-benefit analysis would strive to identify the prime movers among these and other costs and benefits for all sides in a coercive campaign.

<sup>9</sup> Krepinevich, Part I, 4.

<sup>10</sup> Krepinevich, *The War in Iraq*, 4.

## Notes

<sup>11</sup> Post-Conflict Reconstruction: Task Framework, 3. The four pillars of PCR are: security; justice/reconciliation; social/economic well-being; and governance/participation.

<sup>12</sup> Cordesman, 4.

<sup>13</sup> Cordesman, 4.

<sup>14</sup> Cordesman, 4.

<sup>15</sup> Recall that Governance and Security are the first two pillars of post-conflict reconstruction according to the experts at CSIS. Arguably, these are the primary pillars without which no stable society can be constructed.

<sup>16</sup> The Air Force “Checkmate” Strategy Division and its Navy counterpart “Deep Blue” hosted a recent conference on GWOT and terrorism. The Coercion Working Group was a subset of this conference.

<sup>17</sup> The weapon should accommodate both passive and active guidance. It should have passive GPS-guidance capability like the JDAM for all-weather, stationary targets, and it should have semi-active laser guidance capability for fleeting or moving targets as well.

<sup>18</sup> The impact of third-party and domestic outcomes in a coercive campaign is concisely explained by Col Tom Ehrhard in a thesis he wrote as a major at the School of Advanced Airpower Studies entitled, *Making the Connection: An Air Strategy Analysis Framework*.

<sup>19</sup> Sincere thanks to Wing Commander Harry Kemsley, Royal Air Force, for his extremely informative briefing on the potential of social network analysis as a tool for the warfighter.

<sup>20</sup> Jannarone, 1. According to Greg Jannarone, “SOCIAL NETWORK ANALYSIS [SNA] is the mapping and measuring of relationships and flows between people, groups, or organizations. The nodes in the network are the people and groups while the links show relationships or flows between the nodes...For intelligence analysis, the patterns and implications of these relationships are of key importance.” A related concept is “Influence Networks:” “a conceptualization and/or graphical representation of known or assumed entities...which represent the effective sources of information, advice, *motivation*, or obligation for an individual or small decision-making group.”

<sup>21</sup> Hoffman, 12.

## Chapter 7

### Recommendations and Conclusion

*But he must never forget that he is moving on devious paths where the god of war may catch him unawares. He must always keep an eye on his opponent so that he does not, if the latter has taken up a sharp sword, approach him armed only with an ornamental rapier.*

—Carl von Clausewitz

Compellence is a timeless form of dispute resolution. Although it is not widely understood, there is a growing body of thought on its essential concepts. Significantly for the military professional, compellence has historical roots in the classic text on warfare by Clausewitz. He recognized that it was a valid—and valuable—form of warfare. He also recognized that it could be difficult to implement, and as the quote at the beginning of this chapter indicates, one must always keep an eye on the opponent's actions and intentions.

The preceding chapters have shown that compellence is not prescriptive. Heuristic, general rules may be the best we can do. Keep your costs low. Impose high costs on your opponent. Know your adversary and evaluate the inevitable asymmetry of interests between yourselves. Objectively determine who seems to have the stronger will at the outset. Make strategic choices on how—and if—compellence should be implemented, understanding that those choices will affect the nature and quantity of costs that will be paid on all sides.



Measure the costs that are important to your own side, and measure what is important to the enemy. Look for inflection points on the cost curves and be able to explain their causes—they indicate significant changes in strategic or operational outcomes.

### **Airpower Lessons for Compellence**

In the area of compellence and counterinsurgency, airpower has three primary strategic benefits: the ability to limit one's own costs; the ability to significantly increase the enemy's costs; and the ability to shape perceptions and control collateral damage among non-combatants. The first of these benefits, limiting one's own costs, allows one to stay in the fight. The second allows one to pressure the enemy, and possibly cause him to quit the fight. The third ensures the local populace does not become disenchanted with one's efforts and sabotage them through active or passive support for the insurgency.

Regardless of the *means* used, counterinsurgency ultimately must focus on the *ways* in which those means are used: that is, it must focus on the strategic choices that each of the parties in the compellence effort adopt. The successful insurgent will adopt a punishment and denial strategy that enables him to coerce his adversary by imposing unacceptably high costs on him—or exhaust him with lower losses over a longer time—while hiding among the general population. If the people support the insurgent's political cause, they will actively support him; if they do not support the cause, they may passively support the insurgency if they are sufficiently frightened for their own personal safety and security.

On the other hand, a successful counterinsurgent strategy must focus on limiting one's own costs, raising the insurgents' costs, and ensuring the safety, security, and

support of the population in general. One of the most effective methods of limiting one's own costs—especially in terms of lives lost, which seems to be a primary metric for the United States—is to limit the number of personnel who are placed directly in harm's way. The early days of Vietnam provide a possible template for this approach. One must make the host-nation security apparatus responsible for ensuring the safety and security of its own people—the United States and its allies can augment this host-nation force with advisors and trainers, but they should not be the *primary* force for ensuring security.

With this strategic approach, well-trained special operations forces and civil affairs personnel can be augmented with persistent air and space power capabilities to give them enhanced strike and ISR capabilities if and when needed. This reduces the numbers of personnel placed at risk by the coalition and enables them to sustain the counterinsurgent effort because of a reduced level of costs in terms of loss of life. It also fosters the perception among the local population that they are not being invaded or occupied; rather, they are being assisted in their own internal struggle to establish and maintain good governance and security within their own country. Significantly, “The most important virtue that coercive airpower brings to a peace enforcement strategy is the ability to fight asymmetric motivations with asymmetric means.”<sup>1</sup>

## **Recommendations**

Considering the absolute lack of discussion regarding compellence in military doctrine and national security documents, a primary recommendation is to include the principles of compellence in the curricula of military educational institutions such as War Colleges and Command and Staff Colleges. Furthermore, compellence should be defined

and briefly explained in the Department of Defense's capstone joint doctrine publications.

As far as recommendations for countering the compellence aspects of insurgency, three recommendations emerge. First, develop an extremely low-yield, precision-guided weapon in the same yield class as an AC-130 105-millimeter round. The small-diameter bomb is a step in the right direction, but it still packs an enormous punch in densely populated areas. This new weapon should have passive and active guidance so that it can engage both stationary and fleeting targets in urban areas with minimal collateral damage considerations. Second, implement Social Network Analysis as an operational planning tool within the planning cells of combatant commands and the Combined Air Operations Center. Finally, enhance intelligence analysis of insurgent organizations and leadership to better "know the adversary" in the ongoing effort to disrupt and influence their decision-making processes.

## **Conclusion**

As this paper has shown, insurgency is an interactive, compellent process. The United States military must understand and employ the proper counter-coercive strategies and tools in order to protect its own interests and to prevent the insurgents from achieving their goals. At the end of the day, "coercion is about manipulating an adversary's policy choices and decision making."<sup>2</sup> In the case of insurgency, it is a deliberate and protracted campaign of punishment and denial in order to make the situation appear untenable, unwinnable, and hopeless. American strategists and policymakers must understand the importance of managing domestic and international perceptions of the conflict's goals

and progress, as well as the importance of controlling their own costs and those of their supported host-nation, while also imposing unacceptably high costs on the insurgents.

Ultimately, the power to hurt is powerful indeed—compellence is alive and well in the world today, and military leaders and policymakers alike must understand its fundamental principles. The basic cost-benefit analysis model of compellence, while not perfect, provides a useful framework for examining past, present, and potential future costs. It also reveals possible inflection points that mark shifts in the strategic context of the conflict. As the Vietnam case study showed, strategic choices dramatically affect the costs the nation will have to endure in the pursuit of political goals.

Finally, an initial cost-benefit analysis of American military deaths in the current Iraq insurgency does not reveal a cost pattern that resembles Vietnam. There are other costs, both domestic and foreign associated with the United States' engagement in Iraq, and these should be evaluated as well. Nevertheless, in a basic, first-order analysis of military casualties, the early indications are that the country is on a sustainable strategic trajectory in the compellent counterinsurgency campaign in Iraq, although a transition to more host-nation responsibility for internal safety and security is an invaluable and much-needed step in the ultimate victory over the insurgents.

### **Notes**

<sup>1</sup> Kramlinger, 14.

<sup>2</sup> Byman and Waxman, 30.

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