AN INDIRECT APPROACH TO WARFARE

ATTACKING AN ENEMY'S MORAL FORCES

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14. ABSTRACT
In war, if subduing an enemy?s moral force offers three times the potential leverage as defeating his physical forces, then that greater leverage needs to be pursued. As a minimum both forces need to be pursued in equal measure. Typically we describe an opponent?s moral force as: resolve, will, or will to resist; but what are the best methods, potential approaches, and means for attacking the will of an opponent? The methodology of this paper combines literature review and case study using both inductive and deductive reasoning in the development of a new concept. This concept combines psychological effects and force application. The research develops along the lines that there are essentially two great forces in warfare-the physical and the moral. These two forces suggest two distinct approaches to warfare at the strategic level. One, a ?direct? approach, concentrating on the opponent?s physical forces, and the other, an ?indirect? approach, focusing on moral forces. Both of these approaches have been tried in history, with a noted lack of emphasis on an indirect approach. This paper will attempt to give new emphasis to the indirect approach by conveying a better appreciation for the application of psychological effects as they pertain within a context of strategic air targets. This paper suggests something new, ?destructive PSYOPs? as a potential means for attacking an enemy?s moral forces. The paper concludes that we should use both approaches to warfare (direct and indirect), but we need to do the indirect better by: (1) recognizing it (acknowledging need and benefit), (2) developing ways to analyze psychological aspects of an opponent for air campaign planners, (3) developing an ability to translate an assessment of an adversary?s moral forces and psychological aspects into targets for attack as a means to defeat an opponent?s hostile will, and (4) thinking more in terms of influence than destruction.

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The views expressed in this academic research paper are those of the author(s) and do not reflect the official policy or position of the US government or the Department of Defense.

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Preface

My interest in this paper was originally generated as an essay response to the following question: "to coerce enemy leaders, should targets be selected for material effect on their forces or psychological effect on their people?" This same question put in the context of this paper reads: to influence a state, should targets be selected with a direct approach–employing material effects upon its military forces or selected with an indirect approach–employing psychological effects upon its people?

It was, and is, for me an intriguing question. When one begins to think in terms other than physical destruction (direct material effects) it opens up a whole new perspective on targeting. If one knew that rather then simply "destroying something" there was a requirement to "destroy it for an effect," would that change the way you approach its destruction? If the goal is to sway the state's collective psyche inducing a psychological change of heart and mind–would one destroy the same things, and in the same manner? How can one link all destruction back to persuasion? The focus of destruction needs to shift from an emphasis on physical removal over to one concerned with psychological effects–one focused on tilting the mind and resolve.

A new focus for force application begins to emerge, how to get the most psychological effect for your bang, not "bang for the buck" but *psych for the bang*. This new focus (psychological force application) asks; how can one affect the leadership and the people the most, influencing them to lose interest in the fight and gain interest in a

compromise or even your aims. In essence, for an enemy to decide their aims cannot be

met by continuing to fight and to succumb to their opponent's will. That is my quest; this

paper's pursuit–to develop and advocate an indirect approach to warfare.

Acknowledgments and Dedication

I would like to acknowledge the help and guidance given me by Lt. Col. Ernest Howard. He helped shape this paper by sharing his ideas and books along the way, as well as contributing generous amounts of colorful inks to my drafts. A great deal of credit must be attributed to his side of the advisor–student partnership.

In the course of writing this paper it was my good fortune to discover the work of John R. Boyd. I know next to nothing about the man, but I have become acquainted with some of his ideas. In a sense, knowing a man through his ideas is a perfect knowing, unfettered by prejudice and day to day commonalties. John Boyd, unknown and unread by many, died this March. He seems to me a man well worth remembering and studying, so as a tribute, I dedicate this paper to him. To a man who clearly understood winning and loosing and the discourse thereof.

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Abstract

In war, if subduing an enemy's moral force offers three times the potential leverage as defeating his physical forces, then that greater leverage needs to be pursued. As a minimum both forces need to be pursued in equal measure. Typically we describe an opponent's moral force as: resolve, will, or will to resist; but what are the best methods, potential approaches, and means for attacking the will of an opponent?

The methodology of this paper combines literature review and case study using both inductive and deductive reasoning in the development of a new concept. This concept combines psychological effects and force application. The research develops along the lines that there are essentially two great forces in warfare–the physical and the moral. These two forces suggest two distinct approaches to warfare at the strategic level. One, a "direct" approach, concentrating on the opponent's physical forces, and the other, an "indirect" approach, focusing on moral forces. Both of these approaches have been tried in history, with a noted lack of emphasis on an indirect approach. This paper will attempt to give new emphasis to the indirect approach by conveying a better appreciation for the application of psychological effects as they pertain within a context of strategic air targets. This paper suggests something new, "destructive PSYOPs" as a potential means for attacking an enemy's moral forces.

The paper concludes that we should use both approaches to warfare (direct and indirect), but we need to do the indirect better by: (1) recognizing it (acknowledging need

and benefit), (2) developing ways to analyze psychological aspects of an opponent for air campaign planners, (3) developing an ability to translate an assessment of an adversary's moral forces and psychological aspects into targets for attack as a means to defeat an opponent's hostile will, and (4) thinking more in terms of influence than destruction.

Chapter 1

Introduction

Because the moral forces of war are difficult to come to grips with, it is tempting to exclude them from our study of war. However, any doctrine or theory of war that neglects these factors ignores the greater part of the nature of war.

—FMFM-1

Reading the various texts on warfare one is continuously struck by the repeated endorsement of the need to attack an opponent's will. What becomes equally apparent is that, having stated this need, the sources then invariably drop the subject. They prefer to deal with the more practical, the more tangible pursuit, of attacking the opponent's military forces. However, an adversary is not composed of physical forces alone, but by moral forces in equal or greater measure as well. Consequently, by not addressing the moral aspect of an opposing force they deny a complete coercive dimension of the enemy available for exploitation. This paper wades into the moral dimension of warfare and attempts to shed light on these moral forces to determine how they might be attacked.

Scope

This paper focuses on the application of airpower, specifically as it is applied in strategic attack. This focus will lead the reader to recognize the need to develop a methodology for selecting airpower targets; targets selected for their psychological effects

upon the enemy rather than their material effects. The intent of psychological effects over

material effects is to attack an opponent's moral forces rather than his physical forces.

Assumptions

One constraint this paper will place upon itself is described by Joint Pub 3-0,

Doctrine for Joint Operations (February 1995),

> As with all actions of the joint force, targeting and attack functions are
> accomplished in accordance with international law, the law of war, and
> international agreements and conventions, as well as ROE approved by the
> NCA for the particular operation. Military commanders, planners, and
> legal experts must consider the desired end state and political aims when
> making targeting decisions.[1]

In addition to what is outlined above, there is a definite trend within the US military

to attempt to minimize the loss of life both to our forces and those of our opponents.[2]

Closely related to this concern with "loss of life" is an emphasis on inflicting a minimum

of collateral damage upon an adversary. Furthermore, in this *modern conduct of war*, the

American people desire to end wars quickly and get the troops home. Moreover, the US

military can expect that all of its efforts will be scrutinized and second-guessed by the

media. In short America expects its military to follow *the moral high road in war*, which

can be characterized as "win quickly and decisively with unquestionable methods, and

with minimal loss of life and damage." Accordingly, this paper will only explore

methods to attack an opponent's moral forces that satisfy the constraints of this "moral

high road" of war.[3]

The single greatest assumption this paper makes is that one believes in the utility of

airpower, particularly attacking targets at the strategic level as opposed to an exclusive

emphasis on interdiction type targets at the operational level of war.[4] Essentially one

must believe that effectiveness not only includes physical effects, but that it also includes both systemic and psychological effects.[5] Indeed, that airpower continues to transition from being defined in terms of physical *destruction* to evolving terms of *effects*.

Overview

This paper develops the concept of two great forces in warfare, the physical and the moral. These two forces employed at the strategic level suggest two distinct approaches to warfare. One, a "direct approach," attacking the opponent's physical forces, and the other, an "indirect approach," focusing on his moral forces. Both of these approaches have been tried in history, with a noted lack of emphasis on an indirect approach.[6] This paper will attempt to give new emphasis to the indirect approach by conveying a better appreciation for the application of psychological effects as they pertain within a context of strategic air targets. This paper suggests something new, "destructive Psychological Operations (PSYOPs)" as a potential means of affecting an enemy's moral forces. What the paper reveals is not so much actual targets for air attack but the considerations and resources necessary to integrate and develop a methodology for studying an opponent's moral vulnerabilities. This paper asserts that attacking an opponent's military forces is predominantly an approach of attrition and annihilation. As an alternative, this paper proposes an indirect approach one that emphasizes effects over destruction and maneuver over attrition. It continues the tradition of using *leverage* against an opponent by obtaining large distributed effects from proportionally small efforts, and by accentuating the synergy between destruction focused on an opponent's combat capability and moral-

mental-physical effects concentrated on an opponent's war making ability and will to resist.

When two states oppose each other they bring to bear both physical and moral attributes of force in a contest not only of physical capabilities but of will. War is in large part a battle of wills,[7] but knowing this we quickly put aside the moral context and concentrate on the physical elements for our objectives. How important is the moral to the physical, and what is the nature of war?

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[1] Joint Pub 3-0, *Doctrine for Joint Operations*, 1 February 1995, III-25. Note: ROE refers to Rules of Engagement, and NCA is National Command Authorities.

[2] General Charles Horner, *RUSI Journal*, December 1993, 19. General Horner's chief impression from his audience with President Bush at Camp David was the President's deep concern for lives on both sides of the coming contest, Coalition and Iraqi.

[3] With the possible exception of advocating that we consider attacking heads of state, particularly in conflicts with totalitarian governments. See Chapter 6, for a discussion of this subject.

[4] The reader may want to bail out now if he has a hard time with this assumption. The paper will offer arguments indirectly that support strategic air attack as being one of the best means to coerce an opponent, but the debate of the efficacy of strategic airpower is not central to the paper. For a greater discussion of this debate, see (Pro) Major Jason Barlow, *Strategic Paralysis: An Airpower Theory for the Present* (Maxwell AFB, Ala.: Air University Press, February 1994), and (Con) Robert A. Pape, *Bombing To Win: Air Power and Coercion in War* (Ithaca, N. Y.: Cornell University Press, 1996).

[5] The term and concept of a "systemic effect" is an invention, developed within this paper in Chapter 3. Systemic effects: are effects that result from physical destruction of a part or parts of a *system* that serves man. Examples of systems targeted for effects are well known: transportation, electrical, water, and integrated air defense system (IADS), etc., what is not as well accepted is to consider these effects as a class apart from physical and psychological effects. What this paper proposes is that we should consider system effects apart and distinguish them as *systemic effects*.

[6] The history I am concerned with will limit itself to evidence from WWII and more recently the Gulf War. These examples are obviously very limited and not meant to be an exhaustive study of the strategic air attack record.

[7] FMFM 1, page 3, has this to say about will: "The essence of war is a violent clash between two hostile, independent, and irreconcilable wills, each trying to impose itself on the other."

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"Thus, the object of war is to impose our will on our enemy. The means to that end is the organized application or threat of violence by military force."

Chapter 2

The Nature of Warfare

In war, the moral is to the material as three to one.

—Napoleon

FMFM-1 is a succinct book on warfare, particularly for the purposes of sketching out what this paper takes as the landscape of physical and moral forces in war. What follows is a quotation from FMFM-1 that is well worth reading in total for its completeness of thought.

> War is characterized by the interaction of both moral and physical forces. The physical characteristics of war are generally easily seen, understood, and measured: hardware, technology, physical objectives seized, force ratios, losses of material or life, terrain lost or gained, prisoners or material captured. The moral characteristics are less tangible. (The term *moral* as used here is not restricted to ethics--although ethics are certainly included--but pertains to those forces of psychological rather than tangible nature, to include the mental aspects of war.) Moral forces are difficult to grasp and impossible to quantify. We cannot easily gauge forces like national and military resolve, national or individual conscience, emotion, fear, courage, morale, leadership, or esprit. Yet moral forces exert a greater influence on the nature and outcome of war than do physical.[1]

If one accepts what FMFM-1 says about physical and moral forces in warfare, and believes that Napoleon's maxim is true, then one may be tempted to try to exploit an opponent's moral forces as a potential shortcut to victory.

Clausewitz's time honored concept of Centers of Gravity (COGs)[2] introduced the idea that an attack on the enemy's critical centers can result in a disproportionate effect

compared to the amount of effort expended. Today we call this concept *leverage*. Taken further, leverage implies a more efficient use of power and a hastening of the work, in essence a "shortcut." The question then becomes one of determining what COGs can be associated to the moral forces of an enemy. Where does the center, the strength, the vulnerability of an opposing state's will lie? To begin to answer this question, we must first begin with defining moral forces.

Moral Forces

A state's moral forces are made up of those elements that collectively make up its psyche, its state of mind and will. FMFM-1 gives some insight: moral forces are not "hardware, technology, physical objectives, force ratios, losses of material or life, terrain lost or gained, prisoners or material captured." Instead, they are aspects of the opponent that have a psychological rather than physical nature, such as, national resolve, military resolve, national or individual conscience, emotion, fear, courage, morale, leadership or esprit. Ideas similar to these are echoed in a graduate thesis by Major Jason Barlow:

> The population embraces all of the ubiquitous features of a country that are important but hard to categorize and quantify. These include nationalism, morale, will of the people, ethnocentrism, the ability to endure hardship, esprit de corps, and religious conviction or fervor.[3]

Additional insights into the composition of moral forces can be gleamed from the lecture notes of John Boyd. In his lecture he defines the essence of moral forces as pertaining to the human conditions of initiative, adaptability and harmony. An adversary desiring to counter an opponent's moral forces would counter these conditions with menace (initiative), uncertainty (adaptability) and mistrust (harmony). The aim being to,

pump-up friction via negative factors to breed fear, anxiety, and alienation in order to generate many non-cooperative centers of gravity, as well as subvert those that the adversary depends upon, thereby sever moral bonds that permit the adversary to exist as an organic whole.[4]

Boyd goes on to say that the name-of-the-game is to, "morally-mentally-physically isolate the adversary from allies or any outside support as well as isolate elements of the adversary or adversaries from one another and overwhelm them by being able to penetrate and splinter their moral-mental-physical being at any and all levels." His ideas of isolating an opponent are interesting because they are in evidence in work by Clausewitz with regard to COGs[5] and by Colonel John Warden with his decapitation objective of "Instant Thunder."[6]

Hostile Ability and Hostile Will

Clearly what is meant by an opponent's moral forces are those forces that make up the non-physical realm of their opposition, not hostile ability but *hostile will*.[7] Hostile ability is straightforward, referring to an adversary's armed forces, their military instrument, what in the course of this paper is defined as their physical forces most suitable to the direct approach. Hostile will, on the other hand, requires that two main areas of the opponent's psyche be addressed. First, their willingness to continue to resist the imposition of our policies must be overcome and second, they must be induced to willingly accept our originally objectionable policies. What is essentially being sought from an opponent is to defeat their will–their moral forces.

If we accept that there are two primary forces in warfare to be combated, those of physical and moral forces then this suggests one can choose to focus on one or the other force or both.[8] This in turn suggests two macro approaches to warfare, one focused on

physical forces (what this paper calls a direct approach) and one focused on moral forces

(what this paper terms an indirect approach). These two approaches to warfare will be

the subject of the next chapter.

Notes

[1] FMFM 1, 12. It has recently come to my attention and may be of interest to the reader that if one perceives a similarity in the work of John Boyd and FMFM-1 it is because John Boyd indirectly influenced the content of FMFM-1 through his relationship with the Marine Corp. For a discussion of this relationship see, James G. Burton, *The Pentagon Wars: Reformers Challenge the Old Guard*, (Annapolis, Md.: Naval Institute Press, 1993), 3.

[2] A great deal of debate can be explored on the whole notion of "centers-of-gravity" some of it of very great interest. But, in general the idea of COGs is well accepted in US military doctrine and over time has been slightly modified to incorporate the dual ideas of strength(vital center, criticality) and vulnerability as comprising a COG. The definition I will use henceforth is derived from Joint Pub 1-02, *Department of Defense Dictionary of Military and Associated Terms*, 23 March 1994: "those characteristics, capabilities, or localities from which a military force derives its freedom of action, physical strength, or will to fight."

[3] Maj Jason B. Barlow, *Strategic Paralysis: An Airpower Theory for the Present,* (Maxwell AFB, Ala., SAAS, Air University, 1994), 60. The inclusion of "ethnocentrism" in Barlow's quotation seems out of place.

[4] John R. Boyd, "A Discourse On Winning And Losing," lecture notes, (Maxwell AFB, Ala., August, 1987), 125.

[5] Carl von Clausewitz, On War, transl. and ed. by Michael Howard and Peter Paret, (Princeton: Princeton University Press, 1984), 92-93. "It is possible to increase the likelihood of success without defeating the enemy's forces. I refer to operations that have *direct political repercussions*, that are designed in the first place to disrupt the opposing alliance, or to paralyze it, that gain us new allies, favorably affect the political scene, etc."

[6] Col John A. Warden, III, *The Air Campaign: Planning for Combat* (Washington, D.C.: Pergamon-Brassey's, 1989), 44. "Destruction or isolation of any level of command may have a serious–and perhaps fatal–impact on the unit or units subordinate to it. Clearly, command, with its necessarily associated communications and intelligence gathering functions, is an obvious center of gravity, and has been from the earliest times."

[7] Donald M. Snow, and Dennis M. Drew, *From Lexington To Desert Storm: War and Politics in the American Experience,* (New York, N. Y., M. E. Sharpe Inc., 1994), 8.

[8] The implication is that we should do both. But we (USAF) are really organized to do one--to attack physical forces. We have difficulty identifying "mental-moral targets" and even greater difficulty measuring the "effects" of their associated attacks. It all comes back to *targeting for effects* versus targeting for destruction. There is a need to one, develop a methodology to identify desired effects, two, to relate these to targets and three, then be able to measure these effects. There is a need to move away from attrition

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and annihilation type thinking to *influence* type thinking. This "*influence*" has been suggested by Warden (J. F. C. Fuller) in the concept of "*paralysis*" and by Deptula more recently in the concept of "*control*."

Chapter 3

Two Approaches To Warfare

The aim in war is to achieve our will. The immediate requirement is to overcome our enemy's ability to resist us, which is a product of the physical means at his disposal and the strength of his will. We must either eliminate his physical ability to resist or, short of this, we must destroy his will to resist.

—FMFM-1

As FMFM-1 so aptly puts it, in warfare we must either destroy the enemy's *ability to resist* or destroy his *will to resist*. This concept is similar to Drew and Snow's writings on *hostile ability* and *hostile will*. The distinction this paper will make between the two approaches is that attacking hostile ability is the *direct approach* aimed at physical forces and attacking hostile will is the *indirect approach* aimed at moral forces.

Three Perspectives on Direct and Indirect

The terms "direct" and "indirect" as used in this paper need some further explanation and expansion. There are three different orientations from which to consider the terms. The three perspectives are the movement to the attack, object of an attack, and the intended effect of the attack. The orientation used by this paper will be concentrated on the *intended effect of the attack.*

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Movement **to the Attack**

From this perspective it is not the object or effect of the attack that matters but how one *moves* (avenue of approach) to the attack. For example, a frontal assault is direct, attacking from the flank or rear is an indirect approach. One could take this definition further by qualifying it to the defenses of the opponent, that is attacking other than into his defensive strength or orientation is an indirect approach.

This paper for purposes of classification is concerned with the later two perspectives, the *object* (what) and *effect* (result) of the attack to distinguish the type approach being applied. The movement to the attack (how) is not as relevant and is assumed in this paper to be from the air.

Object **of an Attack**

This orientation focuses on the *what* of the attack, that is, the *object* being targeted. If the object of the attack is the opponent's military force, this is a direct approach. The aim of such an attack is to destroy the enemy's military forces and their ability to resist. When on the other hand the object of the attack is something other than an opponent's military forces, that comprises an indirect attack. Those other forces can include, by major category, leadership, industry, population, transportation, communications, and alliances.[1] To sum, from this perspective, an approach aimed at military forces is direct and an approach at other (than armed forces) targets is indirect.

Effect **of the Attack**

The focus in this orientation is not so much the what (object) of the attack but the *result* or *effect* of the attack. From this orientation there are multiple results related to

targeting, all expressed as effects: material effects, systemic effects, and psychological effects. The purpose of targeting for a *material effect* is physical destruction; the desire is to kill or damage to incapacitate; the realm of these effects is predominantly in the physical dimension and hence measurable. This might in part explain our preoccupation with material effects.

The purpose of targeting for a *systemic effect* is to disrupt or dislocate a system. The desire is to induce a cascading effect by attacking a critical node of the system and in turn cause its degradation or collapse. The realm of these effects is in the physical and mental−moral dimensions.[2] These effects are more difficult to measure; the effectiveness is indicated not by physical destruction so much as by the overall result of the effects to the system function as a whole. For example, in the case of an electrical switching station, did the destruction result in a disruption and lack of power to the area or equipment desired? The effectiveness of the attack should be considered in more than the physical destruction (material effect) of the target. The true (significant) effect is the degree to which the larger system and area served by that system was affected. This in turn implies that Battle Damage Assessment (BDA) or what should more properly be called Target Effects Assessment (TEA) needs to evolve beyond a simplistic viewing of the impact area and physical destruction. Its focus should be on seeking evidence of the effects on the enemy as a result of the attack. For instance, using our example, an appropriate measure of effectiveness (MOE) could focus on the loss of power to a key communication sector as a result of the attack on the electrical switching station.

The purpose of a *psychological effect* is moral destruction, the desire is to demoralize, create fear, doubt, and uncertainty, to erode the will of the opponent, the

realm of these effects are in the moral–mental dimensions.[3] These effects are the hardest to measure, and are usually not the main purpose of the attack. It has been said that attacks from the air have a large component of "shock" and are therefore inherently psychological. Nonetheless, shock aside, if an indirect approach is to succeed, not only must targets be chosen with moral degradation in mind, but the attendant psychological effects need to be measurable as well. The development of moral-mental effects targets is the subject of this paper; their measurement is not.[4] To summarize this section, an attack with the main purpose to affect materially (physical destruction) is direct and an attack with the purpose to affect systemically or psychologically is indirect.

Approach Classification Scheme and Examples

The classification scheme for identifying which approach to warfare is being used is twofold. First, look at the object of the attack, if the attack is against military forces it is direct, and if against other than military forces it is indirect. Next, to further discriminate, look at the effect of the attack. If the intended effect is material then it is definitely a direct approach, if on the other hand the effect is psychological or systemic then the approach is indirect.

If troop emplacements are carpet-bombed, the object, military forces, makes such an approach direct. Next one must examine the effect of the attack. In this case the desired effect was to demoralize the troops. Demoralization is a psychological effect—hence this attack works out to be using an indirect approach to warfare. *The effect takes precedence over the object to discriminate the type approach.* To be more precise, the *predominant*

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effect takes precedence over the object of the attack. Some troops are killed during the bombing (physical effect) but the predominant effect is demoralization.

A command facility is identified and attacked deep within an opponent's territory. The facility's primary functions are command, control and communications (C3) for both military and government leaders. The object of the attack is not strictly military forces since the bunker also includes government leadership figures and communications. So, it is unclear which approach is being used. The desired effect is to isolate the state's military forces and population from its civil and military leadership and thereby influence the state's ability to control itself. Isolation and control are psychological effects, this approach then, is indirect.

In another example, a bridge which is the sole ground transport route for troops, is bombed adjacent to a combat unit. Since the bridge is within the transportation category and not a military force, it appears initially to be an indirect approach. However, the desired effects were to: isolate the unit, weaken it logistically, limit its movement, and ultimately destroy it.[5] Therefore the desired effect (end result) is material and hence represents a direct approach. What discriminates between the approaches in the examples is not the object attacked but the *desired effect*. This same logic will be applied throughout the paper to discriminate between the two approaches to warfare.

Though simple in concept, classification can sometimes be difficult because all objects are by definition material. Since there are not psychological objects, one must always look to the desired effect to classify the approach. The central challenge of the indirect approach and this paper is to determine how to attack non-objects, such as moral

forces (and systems), with selective destruction to induce psychological systemic effects that influence the opponent's moral and mental being.

To help illustrate the two approaches the following table seeks to develop the two concepts by offering associated ideas with each approach to compare and contrast them, and, where possible, to cite a reference for the associated idea.

Table 1. Direct and Indirect Approaches to Warfare

Direct Approach	Reference	Indirect Approach
PHYSICAL FORCES	FMFM-1[6]	MORAL FORCES
MATERIAL EFFECTS	Barlow[7]	PSYCHOLOGICAL EFFECTS
Hostile ability	Drew and Snow	Hostile will
Physical being	Boyd	Moral−mental being
Physical ability (total means)	FMFM-1[8]	Will to resist (strength of will)
Attrition style warfare	FMFM-1[9] Luttwak[10]	Maneuver style warfare
Annihilation and attrition of enemy force	Deptula[11]	Control over enemy activity and systems
Victory through cumulative destruction of enemy's material assets	FMFM-1[12]	Victory through shattering enemy's cohesion, organization, command and psychological balance
Quantitative; tangible; concrete		Qualitative; intangible; abstract
Outright victory via military force dominance		Shortcut to victory via leveraging cumulative psychological and material effects
Ultimate goal: annihilation		Ultimate goal: capitulation
Military forces as true COG	Clausewitz[13] Barlow	Leadership, industry, armed forces, population, transportation, communications, and alliances as COGs.
Direct and Indirect effects	GWAPS[14]	Indirect effects with second-order consequences
Effect on military forces is not paramount	Warden[15]	All actions aimed against the mind of the enemy command.[16]
Exhaust enemy's physical and moral resistance	Clausewitz[17]	Exhaust enemy's physical and moral resistance
Movement directly into opposing defensive strength		Movement that flanks or comes in behind opposing defensive positions

Summary

The important point to take from table 1 is a summation of the indirect approach to warfare. The indirect approach seeks to attack an opponent's moral forces. The principal effect sought is psychological rather than material. The focus is on wearing down hostile will, the enemy's moral and mental being (his will to resist) in a series of indirect attacks. The ultimate goal is to coerce the enemy–not to annihilate him. That *coercion* is gained by leveraging the cumulative psychological effects that gain victory by shattering the enemy's cohesion, organization, command and psychological balance. Potential enemy COGs for psychological leverage can come from leadership, industry, armed forces, transportation, communications, and alliances. All attacks should be aimed at the moral and mental being of the enemy.

Given these two primary approaches to warfare, the direct and indirect, what evidence from WWII or the Gulf War show the indirect approach being considered, attempted or succeeding? This question is the focus of the next chapter.

Notes

[1] Maj Jason B. Barlow, *Strategic Paralysis: An Airpower Theory for the Present,* (Maxwell AFB, Ala., SAAS, Air University, 1994), 56. The six categories that are listed combined with the seventh (armed forces) collectively make up the National Elements of Value (NEV) dynamic targeting model. The author develops this model fully in chapter five of his work.

[2] The term and concept of a "*systemic*" effect may be new to the reader, as an effect co-equal to physical and psychological effects. Daniel T. Kuehl, ("Thunder and Storm: Strategic Air Operations in the Gulf War") in *The Eagle In The Desert*, uses it in the following passage (page 123): "The message for the future is that any modern military-industrial state has precisely the same *systemic* vulnerabilities that Iraq possessed: vulnerable energy supplies, vulnerable C3 nodes and networks, leadership vulnerable to disruption and dislocation, and a nation open to American airpower." Emphasis added. Additionally, the underlying theory proposed is as follows. Man (physical) is composed of his heart and mind [moral–mental (psyche)] and everything he has invented to serve

him (systems). These three areas, man, his systems, and his psyche collectively make up a *trinity of will*. Each "system" is unique and requires specific effects.. *Physical* effects versus man the *body*. *Systemic* effects versus man's *systems*. *Psychological* effects versus man's *psyche*. All ultimately to influence the man who is physically, systemically and morally opposed to your trinity of will.

[3] John R. Boyd, "A Discourse On Winning And Losing," lecture notes, (Maxwell AFB, Ala., August, 1987), 134. Boyd puts all three of the dimensions together, the moral-mental-physical and relates an overall strategy aimed at this composite of the enemy's being. "*Strategy:* Penetrate adversary's moral-mental-physical being to dissolve his moral fiber, disorient his mental images, disrupt his operations, and overload his system, as well as subvert or seize those moral-mental-physical bastions, connections, or activities that he depends upon, in order to destroy internal harmony, produce paralysis, and collapse adversary's will to resist."

[4] Some of the current measures of psychological effects are prisoner of war debriefs and inferences gained from the quality of military resistance shown by the enemy. Obviously, we should not pursue what we cannot measure, and this may in part explain the difficulty the Air Force is experiencing in advocating a strategy of effects versus a strategy of attrition to the other services. Effects are not well understood and consequently accepted. The more precise we can become in inducing a desired effect and an associated ability to measure that effect the more able we are going to become not only in advocating this strategy of influence, but more importantly in planning and executing an "effects" based approach.

The difficulty may also lie in the premise that physical effects are *quantifiable* and psychological effects are *qualitative*. Qualitative assessments are not considered hard evidence or serious analysis at present in most military operations' circles. We seem to have temporarily taken "military judgment" out of our formula for assessments. The present reigning "belle of the ball" is definitely analysis; we worship at its altar, imbuing the analysis with power over us–even when it is at odds with our experience and intuition.

[5] Joint Pub 3-0, *Doctrine for Joint Operations*, 1 February 1995, III-21. This document in paragraph k, offers yet another interpretation of direct and indirect, the example it gives is however very similar.

[6] FMFM 1, 12.

[7] Barlow, 28. Barlow uses the term "physical" instead of material when he refers to the two effects.

[8] FMFM 1, 20. "We must either eliminate his physical ability to resist or, short of this, we must destroy his will to resist." See epigraph at beginning of this chapter. The references to "total will" and "strength of will" in parenthesis are taken from a different source. The source for these terms is, Michael I. Handel, *Masters Of War: Classical Strategic Thought* (Portland, OR.: Frank Cass & Co. Ltd., 1996), 206.

[9] FMFM-1, 28-29.

[10] Edward N. Luttwak, "Political Strategies in Coercive Diplomacy and Limited War," in *Political Warfare and Psychological Operations: Rethinking the US Approach,*

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ed. Carnes Lord and Frank R Barnett, (Washington D.C.: National Defense University Press, 1989), 164-165.

[11] Col David A. Deptula, *Firing for Effect: Change in the Nature of Warfare,* Defense and Airpower Series (Arlington, Va.: Aerospace Education Foundation, 1995), 8.

[12] FMFM-1, 28-29.

[13] Barlow, 30, 39. Barlow interprets Clausewitz as concluding that the armed forces are the enemy's center of gravity. Carl von Clausewitz, *On War*, ed. Michael Howard and Peter Paret (New Jersey: Princeton University Press, 1976), on page 596 has this to say: "Still, no matter what the central feature of the enemy's power may be—the point on which your efforts must converge—the defeat and destruction of his fighting force remains the best way to begin, and in every case will be a significant feature of the campaign."

[14] Thomas A. Keaney and Eliot A. Cohen, *Gulf War Air Power Survey Summary Report* (Washington D.C.: Government Printing Office, 1993), 56. Essentially, what this analysis taxonomy holds is that direct effects are material (destruction) and indirect effects are defensive adjustments made as a result of that destruction. Second-order consequences are an indirect effect resulting from attack that cause psychological adjustments (as in fear and abandoning of equipment).

[15] Col John A. Warden III, "Employing Air Power in the Twenty-first Century," in *The Future of Air Power in the Aftermath of the Gulf War*, ed. Richard H. Shultz, Jr. and Robert L. Phaltzgraff, Jr. (Maxwell AFB, Ala.: Air University Press, July 1992), 67-68.

[16] Michael I. Handel in his book *Masters Of War: Classical Strategic Thought*, on page 76 accredits Sun Tzu with emphasizing a like (to Warden's) concentration of efforts on the opponent's mind. Handel states: "Among the force multipliers recommended by Sun Tzu are maneuver; reliance on intelligence; the extensive use of deception and diversionary measures to achieve surprise; the 'indirect approach'; and the use of psychological means to undermine the enemy's will to fight."

[17] Carl von Clausewitz, *On War*, ed. Michael Howard and Peter Paret (New Jersey: Princeton University Press, 1976), 93. "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." Fortunately today, modern precision weapons and the ability to attack many targets in parallel allow for this wearing down to be greatly accelerated.

Chapter 4

The Indirect Approach In Past Wars

In January 1943, at Casablanca, the objective of the strategic air forces was established as the "destruction and dislocation of the German Military, industrial, and economic system and the undermining of the morale of the German people to the point where their capacity for armed resistance is fatally weakened."[1]

—The United States Strategic Bombing Surveys (USSBS), 1945

Phase I, the strategic air campaign, called for attacks against twelve interrelated target sets in order to "result in disruption of Iraqi command and control, loss of confidence in the government, and significant degradation of Iraqi military capabilities."

—Gulf War Air Power Summary Report, 1993

The opening epigraphs alone give ample evidence of the intent of both strategic air campaigns to employ an indirect approach. This is supported by using the approach classification scheme presented earlier. First, looking at the object of the attacks we see that they are other than military forces, such as industry, economic systems, the German people, and the twelve interrelated target sets.[2] Second, the desired effects of the attacks, "undermining of morale, fatally weakening armed resistance," and inducing a "loss of confidence in the government" are all psychological effects. Granted, in both air campaigns the direct approach of attacking the armed forces with the intent of materially destroying them is a primary competing objective. However this paper is concerned with exploring the case for an indirect approach to warfare while fully appreciating the

primacy of the direct approach to warfare as a viable strategy. The aim is to increase interest in the indirect approach, and then couple both approaches for balance and synergy in the overall air strategy.

There is an amazing similarity between the air campaigns of WWII and the Gulf War.[3] Both had a lead phase goal of achieving air superiority, and both had considerable overlap in their target sets (see Table 2).

Table 2. Target Set Overlap

World War II (Europe)	Gulf War
Matches	
Aircraft Plants Tank & Armored Vehicle Plants	Military Support Facilities
Defeat German Air Force	Strategic Air Defense Airfields
Oil	Oil
Railways	Railroads & Bridges
Waterways Submarine Building Yards	Naval Ports & Facilities
Electric Power[4]	Electric Power
V-1 Launching Sites	Scud Facilities
No Matches	
Ball Bearing Plants	Chemical, Nuclear, & Biological Facilities
Steel	*Leadership*
The Civilians	*Command & Control and Communications*
	Republican Guard[5]

Looking at the table it is clear that the economy and infrastructure were prime objectives of both campaigns including industry and transportation. Both targeted military forces and specific missile threats of their times. The "no match" section of the table shows the progress in technology (Weapons of Mass Destruction) and an evolving focus in the Gulf War to leadership and command, control and communications (C3), Warden's decapitation objective.[6] The principal targets identified with psychological

effects vice material effects (from Table 2) are: "The Civilians" from the WWII column and "Leadership and C3" from the Gulf War column, these then will be the subject of further examination.

World War II: Combined Bomber Offensive

The American and British Air Forces pursued two different strategies in the European theater.

> While the British enthusiastically embraced a policy of indiscriminate night area bombing, the Americans pursued daylight aerial offensives against well-selected military and industrial targets that were justified by both "strategic judgment and morality."[7]

In Europe any civilians killed during Army Air Force (AAF) bombings were killed unintentionally.[8] The British, however, fully intended to undermine German morale by so called "terror bombing" or "morale bombing" of cities.[9] The British in essence led by Sir Arthur "Bomber" Harris fully committed themselves to the "indirect approach" with the intent, through psychological effects, to induce large scale disruption, dislocation and demoralizing of the German population. That is not to say that American bombing strategists did not expect some psychological effects from their bombing.

> Some leaders who retained strong scruples against killing civilians, such as Spaatz, would try to develop and execute a plan capitalizing on the inherent psychological shock effects of air attacks, designed to terrorize without killing by collapsing enemy morale through a widespread assault on military or economic targets.[10]

The intent of the British to bomb civilians directly, and the Americans to bomb the economy is clear. Both intended in part, (in differing degrees) to affect the morale of the German people and military by their attacks.

The USSBS in its Summary Report on the European Theater assesses the following

overall results for the efforts targeted at the German people.

> Their morale, their belief in ultimate victory or satisfactory compromise
> and their confidence in their leaders declined, but they continued to work
> efficiently as long as the physical means of production remained. The
> power of a police state over its people cannot be underestimated.[11]

In looking overall at the results, the material effects were successful in that the

". . . full-scale and free exploitation of air weapons over the heart of its territory

[Germany] . . . [led to] . . . the decline and eventual collapse of their economy."[12] But as

it turns out WWII is a mixed bag, in Europe the indirect approach was unsuccessful (the

civilian morale was not critically undermined) however, in the Pacific the US did engage

in the bombing of Japanese cities (indirect approach) and most historians credit these

attacks as being "decisively effective" in compelling Japan to capitulate.[13]

To sum, the indirect approach was tried in Europe and failed, while in the Pacific it

succeeded. Arguably, Germany and Japan were to be the last chance America had to

wage war on a fully industrialized nation until the Gulf War.[14] In part, due to the mixed

results of the theaters and the advent of the atom bomb, conventional strategic bombing

would not again be employed to a similar scale until the Gulf War.[15] Another result of

this episode in US military history (because of an evolving world moral conscience

regarding war) is that the intentional practice of bombing civilians is no longer lawful or

tolerated by US forces. Hence, the intentional bombing of civilians will not be a

candidate target for the indirect approach.

Gulf War: Phase I Strategic Air Campaign

In the Gulf War strategic airpower continued in the tradition of WWII to disorganize and paralyze the enemy's military operations and support structure by attacking carefully selected targets.[16] The Gulf War targets identified previously with the indirect approach are leadership and C3. Ironically, the attacks against the Iraqi surface forces, as will be shown, proved to be the most decisive psychologically. Looking first at leadership and C3, intent, attempts and results will be examined.

The intent of the attacks on leadership and C3 was to incorporate "both political and military dimensions"[17] (psychological and material effects respectively). The intent was to isolate command from control of military forces and on the political side to isolate Saddam from the Iraqi people by attacking both governmental and defense command personnel, facilities, and communications. Indeed, the overall intent as the Gulf War Air Power Survey (GWAPS) Summary Report points out was far more ambitious:

> Planners counted most on these strikes to end the war by air power alone. The strikes, in coordination with others, would not just neutralize the government but change it by inducing a coup or revolt that would result in a government more amenable to Coalition demands.[18]

Together a total of 260 precision and nonprecision attacks were flown against the leadership category and another 580 precision and nonprecision strikes went against the C3 category. The result was disappointing, Saddam was not killed and his regime remained in power.[19] GWAPS summarizes the results by initially concluding that:

> Thus, the results of these attacks clearly fell short of fulfilling the ambitious hope, entertained by at least some airmen, that bombing the L [leadership] and CCC [C3] target categories might put enough pressure on the regime to bring about its overthrow and completely sever communications between the leaders in Baghdad and their military forces.[20]

But, they go on to qualify and soften this conclusion somewhat by stating, "Common sense would argue that strikes against these two target categories must have imposed *some*, if not *considerable*, disruption and dislocation on the Iraqis involved."[21]   In the final analysis, given the inability to interview the Iraqis involved in these attacks it is impossible to say how close the Coalition might have come to causing the hoped for collapse of the Saddam regime.

The watershed target category for psychological effects according to GWAPS turned out to be a category associated with the direct approach. Air interdiction attacks against surface forces, supplies and communications and their attendant material effects turned out to have an effect and benefit beyond destruction:

> The air interdiction, the damage to the communications and supply
> systems, along with the equipment attrition during the war, clearly affected
> the Iraqi soldiers beyond the inflicting of casualties during that period.
> The Iraqi soldier, by and large, lost his determination to fight.[22]

In fact, based on interrogation reports of Iraqi POWs the overwhelming impression reported was their sense of futility after weeks of intense and non-stop bombing. Another important observation is that it was not the equipment loss (the material effect) that caused the demoralization and paralysis of the troops but that their confidence (psychological effect) in their equipment doing them any good was shattered.[23]

It is tempting from the Gulf War to conclude for airpower that strategic attacks yield marginal results while air interdiction pays large dividends in material and psychological effects.[24] But, the jury is still out (potentially forever) on how close the strategic attacks against leadership and C3 really came to defeating the will of the Iraqi leadership and people to resist.[25] It should also be noted that of the three major components of the air

campaign: control of the air, strategic attacks, and air attacks on surface forces; strategic attacks only made up 15% of the total air strikes as opposed to 56% devoted to surface forces.[26]   So, in the end it is probably safe to say that when we design attacks for psychological effects, they do not always achieve results to the degree we would hope for, and when we attack for material effects they can have an unexpected second-order consequence of affecting the enemy psychologically. The challenge is to develop a target analysis that designs attacks to achieve the effects we desire. In essence, to develop an *effects based* approach to airpower.

As a postscript it is probably important to mention that as result of the Gulf War, a *new ethic* of airpower emerged. It is no longer sufficient merely to refrain from attacking civilians; now, one must minimize long term damage to an enemy's infrastructure as well. The new intent is to only cause short-term interruption and degradation to such things as electric and oil production. We ask our military officers to think in terms of the *desired end state*, mindful that they may possibly be tasked to help rebuild the enemy, and return the economy to service and production once the conflict is terminated. In essence we are now asked *to build in the undoing* of what we do with the means we employ. Now, we *do it–non-permanently* using temporary incapacitation as much as possible versus permanent removal. This will be a consideration and possible Rule of Engagement (ROE) for future air planners as they focus their campaigns to maximize effects with an indirect approach to warfare.

Towards that goal of improving our understanding of psychological effects the next chapter explores Psychological Operations (PSYOPs).

Notes

[1] *The United States Strategic Bombing Surveys (USSBS): (European War) and (Pacific War).* (Maxwell AFB, Ala.: Air University Press, October 1987), 14. Casablanca established the objectives for the strategic air forces, additionally Eisenhower worked throughout the war with the following directive; his task was to "enter the continent of Europe, and, in conjunction with other United Nations, undertake operations aimed at the heart of Germany and the destruction of her armed forces." Forrest C. Pogue, "The Decision To Halt at the Elbe," in *Command Decisions*, edited by Kent Roberts Greenfield. (Washington D.C.: Center of Military History, US Army, 1987), 481. This guidance while emphasizing the objective of the German armed forces leaves room for considerable interpretation in the phrase "undertake operations aimed at the *heart* of Germany." The heart of Germany can be its industrial, and economic system and the morale of the German people. Given this interpretation, the Casablanca conference and Eisenhower's directive do not have conflicting objectives, so much as a variation in emphasis.

[2] Keaney, 42. The twelve target sets include: strategic air defense; chemical, nuclear, and biological facilities; leadership; command, control, and communication sites; electric power; oil facilities; railroads and bridges; airfields; naval ports and facilities; military support facilities; scud facilities; and the Republican Guards.

[3] The source for the Gulf War target set is indicated in the prior endnote; the WWII set is inferred from: *USSBS,* 14-34.

[4] USSBS, 33. The inclusion of electric power could be misleading; it was a planned target before the war and debated during the war but "was never a target during the air war." The Survey concluded this was an error due to a faulty assumption concerning the potential effectiveness of such attacks. The point to take from including electric power is the similarity conceptually in strategic attack planning in both wars.

[5] I have added the Republican Guard for accuracy. GWAPs on page 40 describes, "Phase I, the strategic air campaign, called for attacks against twelve interrelated target sets." To my knowledge for the Combined Bomber Offensive there is no equivalent target set (such as the Republican Guards) given. The bomber force did not identify combat land forces and specific divisions or armies for attack.

[6] Keaney, 27.

[7] Conrad C. Crane, *Bombs, Cities, And Civilians: American Airpower Strategy in World War II* (Lawrence, Kansas: University Press of Kansas, 1993), 1. Quotation marks appear in original.

[8] This statement is true with two notable exceptions. American bombers did in fact bomb the cities of Dresden and Berlin in 1945. The intent of the raids was to affect transportation targets within the city. However, due to the proximity of these targets within the city center to civilian populations, significant civilian casualties occurred. These raids were not universally endorsed within the 8th AAF and led to confusion over US AAF's commitment to refrain from "morale bombing." This aversion to bombing civilians was not carried over to the Pacific theater, where America eventually felt compelled to bomb Japanese cities both with incendiary and nuclear weapons.

[9] Ibid.

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[10] Ibid., 104.

[11] USSBS, 39. This is an interesting quotation, given we faced another "police state" in Iraq some fifty years later. This suggest a pattern–we combat police states, if so then we should thoroughly study the psychology of these states, concentrating on their political and motivational dynamics–with the goal of discovering psychological leverage for the indirect approach.

[12] Ibid., 38.

[13] Crane, 141. "The massive destruction, social dislocation, and psychological impact of the B-29 campaign against Japanese cities perhaps made it key in the series of shocks that produced a surrender. Even Hansell concedes that the chosen strategy of the fire raids was 'decisively effective' and a 'sound military decision,' especially with the time pressures that existed in the Pacific." Crane supports this with: Craven and Cate, *Army Air Forces*, 5: 662-674; Hansell, *Strategic Air War against Japan*, 74-93.

[14] The reader may well differ with this opinion, but the key clause is "fully industrialized nation." Korea and Vietnam while somewhat modern did not have highly developed economies or transportation infrastructures, and in both cases their strategic supply conduits (China) could not be bombed due to political decisions of the time.

[15] Daniel T. Kuehl, "Thunder and Storm: Strategic Air Operations in the Gulf War," in *The Eagle In The Desert: Looking Back on U.S. Involvement in the Persian Gulf War,* ed. William Head and Earl H. Tilford, Jr., (Westport, Conn.: Praeger, 1996), 117. "This performance [F-117's] helped to break the decades-old paradigm that had translated *strategic* into *nuclear* and relegated all other elements of offensive airpower into a battlefield role." Emphasis in original text.

[16] Keaney, 242.

[17] Ibid., 44.

[18] Ibid., 44-45. See also page 66 for details concerning "Leadership and Telecommunications/C^3."

[19] Michael R. Gordon and General Bernard E. Trainor, *The General's War: The Inside Story of the Conflict in the Gulf* (Boston, Mass.: Little, Brown and Company, 1995), 313-314.

[20] Keaney, 70.

[21] Ibid.

[22] Ibid., 107.

[23] Ibid., 117.

[24] This is essentially one of the conclusions that Robert A. Pape reaches in his book *Bombing To Win: Air Power and Coercion in War*, (Ithaca N.Y.: Cornell University Press, 1996), chapters 1 and 2. He argues that strategic attack is a failure and that the real dividends come from air interdiction. Strategic attack according to Pape uses what he calls a "punishment" strategy unsuccessfully while interdiction achieves success with a "denial" strategy. Again, the intent of this paper is not to get bogged down in an argument over the efficacy of strategic air campaigns but to develop and focus on the use of the indirect approach within a strategic air campaign.

Notes

[25] Kuehl, 122-123. In Daniel Kuehl's mind strategic air power was the central factor in weakening the Iraqi regime. He makes the following case: "It is obvious from what happened immediately after the end of the Gulf War that the Iraqi 'system' was in shaky condition: Two of the country's three major ethnic groups, the Kurds in the north and the Shias in the south, were in open revolt; Iraqi citizens were openly critical of the regime to the world's media on the streets of Baghdad: the infrastructure of daily life (communications, water, electricity, etc.) were in shambles. . . . What brought Iraq to this condition? It certainly was not the defeat of the Iraqi Army in Kuwait. Iraq's losses during the grinding eight-year war with Iran were far worse, and because of Saddam Hussein's control of the internal Iraqi media, the average Iraqi knew little of events in Kuwait. What they did see, especially from the perspective of the larger cities, was the constant evidence of Coalition omnipotence in the air and the inability of Saddam Hussein to prevent the daily passage of Coalition airpower through Iraqi skies . . . the central factor in the weakening of the Iraqi regime was the cumulative impact of the entropy generated in the Iraqi society and regime by the strategic air campaign.

[26] Keaney, 55 and 65.

Chapter 5

Psychological Effects

The psychological dimension affects those fighting the battle, their military leaders and staffs, the political leaders, and the civilian population. On the field of battle, US forces want to face an enemy that is both unsure about its cause and capabilities and sure about its impending defeat—an enemy who, even if unwilling to surrender, has little will to engage in combat.

—Joint Pub 3-53
Doctrine for Joint Psychological Operations

Although, this paper is not about Psychological Operations (PSYOPs), it is about understanding and exploring PSYOPs sufficiently to extract and leverage the existing knowledge within the discipline concerning psychological effects. The intent of looking at PSYOPs is to then apply it to an indirect approach to warfare as brought to bear in a strategic air campaign. To begin, what then is PSYOPs?

PSYOP: Doctrine and Use in Gulf War

PSYOPs is defined in part by JP 1-02 as:

> Planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals.[1]

PSYOPs as conceived uses information conveyed by mass communications as its primary mode of affecting its target audience. The intent of that communication−*to influence*

emotions (morale, confidence, trust), *motives* (purpose of action, determination; will), *objective reasoning* (without emotion and outside influence) *and ultimately behavior* is precisely the goal of psychological effects. What is being described are the enemy's moral forces, his emotions, motives, reasoning and behavior. PSYOPs, by manipulating information and focusing it on the enemy's moral forces, uses the indirect approach. It attempts to achieve its psychological effects with the use of information vice destruction. What if we took this construct and changed the mode and method from information and communication (non-destructive PSYOPs) to weapons and destruction (destructive PSYOPs)? Could we translate the intent of PSYOPs and manipulate the enemy with force application as well as informational application; that is, infuse the strategic air campaign to incorporate targeting for psychological effects with material means (bombing), with the objective of modifying the opponent's moral-mental-physical-being.[2] Because its concern is with the psychological dimension (moral forces) of an adversary,[3] what then does PSYOPs offer that can be potentially translated to force application?

One element of PSYOPs conducted during the Gulf War, as in previous PSYOP campaigns, was the use of leaflets to spread key persuasive themes. In broad terms the four themes disseminated during the Gulf War were: (1) the futility of resistance, (2) safety and fair treatment as a result of surrender, (3) the separation of enemy soldiers from their equipment, and (4) peace, unity, and family.[4] In addition to the leaflets, the Coalition's "Voice of the Gulf" broadcast counters to Iraqi propaganda, and encouraged the Iraqi's to defect and surrender.[5] These are classic examples of PSYOPs; using forms of mass communication to deliver a message aimed at influencing behavior. What

enables PSYOPs to influence behavior is in some cases the use of force with it and in all others "a credible military to back up its promises and to give weight to its threats."[6]

A good example of coupling PSYOPs with force application was a *declare and destroy* technique.[7] B-52s dropped leaflets to specific units notifying them that they would be bombed in the near future, and they were then subsequently bombed. This sent a powerful psychological message of hopelessness and a sense of inevitability about ultimate defeat.[8]

Views On Psychological Effects

Stephen T. Hosmer in a new RAND study closely mirroring the thesis of this paper examined psychological effects from four wars, he provides the following conclusions to maximize psychological effects: (1) keep the enemy under sustained attack, (2) use heavy bombers for surprise and shock effect, (3) make enemy air defenses appear impotent, and (4) condition the enemy to desert his equipment.[9]

Another important source of insight concerning psychological effects through the lens of attacking an enemy's moral forces is provided by "Father OODA," John Boyd. He developed three principal factors to generate negative psychological effects in an opponent, *menace, uncertainty* and *mistrust*. He defines *menace* as "impressions of danger to one's well being and survival;" *uncertainty* he states is "impressions, or atmosphere, generated by events that appear ambiguous, erratic, contradictory, unfamiliar, chaotic, etc.;" and *mistrust* as "atmosphere of doubt and suspicion that loosens human bonds among members of an organic whole or between organic wholes."[10]

A last source view on effects is provided in a new work by Colonel David A. Deptula. The central theme of his paper is that air planners need to shift their focus from targeting for destruction to *targeting for effect*, that the operative key—is *effects* not destruction. His rationale for this shift from destruction to effects is that:

> Rather than the operative means to inhibit enemy activity, destruction should be viewed as one means to achieve control over enemy activity. In this approach, destruction is used to achieve effects on each of the systems the enemy organization relies on to conduct operations or exert influence-- not to destroy the systems, but to prevent them from being used as the adversary wants.[11]

The effects he postulates to achieve control over the enemy are: render ineffective, negate, disable, prevent, neutralize, limit, reduce, and stop.[12]

Taking what PSYOPs doctrine, PSYOPs in the Gulf War, Hosmer, Boyd, and Deptula offer as a whole towards *psychological effects* is a challenging synthesis. To aid in that integration the following table is provided (Table 3).

Table 3. Views on Psychological Effects

Source	Views
J Pub 3-53	Do the following: create uncertainty in the enemy about his cause and capabilities and a belief in his inevitable defeat; degrade his will to fight.
J Pub 1-02	Do the following: influence enemy's emotions, motives, objective reasoning and ultimately control his behavior.
Gulf War (Parker & Hale)	Convey the following messages: futility of resistance; surrender and receive fair treatment; abandon your equipment; peace, unity, and family; declare and destroy.
Hosmer	To maximize effects: keep enemy under sustained attack; use heavy bombers for surprise and shock effect; render enemy air defenses impotent; condition enemy to desert his equipment.
Boyd	Do the following: generate danger-fear of survival (menace); create chaotic, ambiguous and erratic environment (uncertainty); create doubt and suspicion to loosen moral-mental-physical bonds (mistrust).
Deptula	Focus on these effects to control enemy: render ineffective, negate, disable, prevent, neutralize, limit, reduce, and stop. Do all these to achieve effects on each of the systems the enemy organization relies on to conduct operations or exert influence.

A key observation associated with Table 3 is to distill what the viewpoints are saying in terms of *desired psychological outcomes* resulting from attack. In other words, the effects desired are that psychologically the enemy begins to be: uncertain, to doubt his cause, to doubt his capabilities (and equipment), to believe in his inevitable defeat, to become demotivated, to think poorly, to be fearful, to be suspicious, and to be mistrustful. When one begins to beat an opponent this way (morally-mentally), paralyzing his will, it is only a matter of time before the body (state) follows.

The challenge is to take these desired psychological outcomes and develop a methodology that analyzes the enemy in terms of his psychological makeup to assess his critical vulnerabilities that in turn can be translated into targets to affect his overall psychological balance.[13] The overall aim of the analysis is to integrate these targets

(psychological effects) into an indirect approach to warfare as a means to influence an

opponent's moral forces.

Notes

[1] Joint Pub 1-02, *Department of Defense Dictionary of Military and Associated Terms*, March 1994, 304.

[2] John R. Boyd, "A Discourse On Winning And Losing," lecture notes, (Maxwell AFB, Ala., August, 1987), 133.

[3] Joint Pub 3-53, I-1.

[4] Jay M. Parker and Jerold L. Hale, "Psychological Operations in the Gulf War: Analyzing Key Themes in Battlefield Leaflets," in *The 1,000 Hour War: Communication in the Gulf,* ed. Thomas A. McCain and Leonard Shyles, (Westport Conn.: Greenwood Press, 1994), 92.

[5] Joint Pub 3-53, III-3.

[6] Parker, 109.

[7] Martin C. Libicki, "DBK and its Consequences," in *Dominant Battlespace Knowledge*, edited by Stuart E. Johnson and Martin C. Libicki. (Washington, D.C.: National Defense University Press, April 1996), 40. Libicki, also draws from this example of declare and destroy from the Gulf War, using it as a template for a sort of *precise intimidation*. He suggests we: "Using this template, suppose U.S. forces broadcast the identity and location of platforms and then destroyed them. After the correlation between having one's coordinates being broadcast and being destroyed has been sufficiently demonstrated, it may be enough simply to broadcast the identity and location of every found target; those who read their death warrant on the tube [record of broadcast] could be persuaded to abandon their vehicles, saving their blood and weaponry." While, Libicki conveys this thought in an "information warfare" sub-section, clearly it is a combination of information and force application that makes the threat credible and so gives it real psychological leverage.

[8] Parker, 96.

[9] Stephen T. Hosmer, *Psychological Effects of US Air Operations In Four Wars 1941-1991: Lessons For US Commanders* (Santa Monica, Calif.: RAND, 1996), 194-198. This research was sponsored by the Strategic Planning Division, Directorate of Plans, Hq United States Air Force (USAF). I strongly recommend this book for those interested in more fully exploiting psychological effects.

[10] Boyd, 125. Note, the "Father OODA" comment is this author's attempt at admiring humor. OODA refers to Observation-Orientation-Decision-Action; the decision cycle time construct for which John Boyd is best known.

[11] Col David A. Deptula, *Firing for Effect: Change in the Nature of Warfare,* Defense and Airpower Series (Arlington, Va.: Aerospace Education Foundation, 1995), 8.

[12] Ibid., 5.

[13] The idea of a *psychological balance* is borne out in an interpretation of Napoleon by Sir Basil Liddell-Hart, conveyed in an introduction by David G. Chandler. "[Napoleon]: The principles of war are the same as those of a siege. Fire must be

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concentrated on a single point and as soon as the breach is made the equilibrium is broken and the rest is nothing." "As the late Sir Basil Liddell-Hart pointed out, most commentators have seized upon the 'single point' aspect and have ignored the really crucial word 'equilibrium,' which indubitably holds the real point the Emperor was trying to convey: it is through upsetting the foe's *psychological 'balance'* that the road to success lies." Emphasis added. Reference: David G. Chandler, *The Military Maxims Of Napoleon*, trans. Lt. Gen. Sir George C. D'Aguilar (New York: Macmillan Publishing Co., 1988), 15.

Chapter 6

Methodology for Analysis and Application of Destructive PSYOPs

Strategy: *Penetrate adversary's moral-mental-physical being to dissolve his moral fiber, disorient his mental images, disrupt his operations, and overload his system, as well as subvert or seize those moral-mental-physical bastions, connections, or activities that he depends upon, in order to destroy internal harmony, produce paralysis, and collapse adversary's will to resist.*

—John R. Boyd

Before looking at assessing an opponent's psychological effect requirements and the application of those effects, the term "destructive PSYOPs" needs to be fully understood. This paper proposes and defines destructive PSYOPs (D-PSYOPs) as:

> The application of force to induce psychological effects upon the enemy's political and military leaders and staffs, armed forces and civilian population. D-PSYOPs should be applied throughout the conflict, specifically as part of the strategic, interdiction and battlefield preparation phases of the overall air campaign. Its effects are achieved by bombing to induce psychological effects to influence enemy's emotions, motives, objective reasoning, and ultimately behavior of its government, military and people. D-PSYOPs leverages the potential to reduce costs to both sides by defeating the enemy's hostile will quickly.

What are the potential processes, players, and products that need to be developed as an overall methodology to support the application of destructive PSYOPs?

Methodology for Analysis

The challenge of analyzing the enemy in terms of his behavior is a daunting one. An intuitive assessment would conclude that we are not studying the enemy's moral forces sufficiently (violating one of Sun Tzu's chief tenets of war). One of the chief difficulties associated with this estimate is that it requires an assessment on non-material aspects of an opponent. It is not a tangible field of study but in fact a very abstract pursuit to assess: motives, emotions, values, trust, harmony, and intent at multiple levels within a state. That being said some general guidelines can be postulated.

The general process that analyzes the enemy's behavior to develop the desired psychological effects that lead in turn to targets needs to be an inter-disciplinary effort, combining the talents of many different organizations. Destructive PSYOPs requires extensive information concerning the psychological objective, its identity, location, and vulnerability. Additionally, Joint Pub 2-0 builds a sound framework for knowing the adversary:

> This understanding includes a sophisticated knowledge of the adversary's goals, objectives, strategy, intentions, capabilities, methods of operation, vulnerabilities, and sense of value [benefit] and loss [cost]. The J-2 must understand the adversary's character, culture, social norms, customs and traditions, language, and history.[1]

The analysis required can best be understood in terms of looking at a small sample of questions that could be asked: (1) what does the enemy value, (2) what is his motivation for fighting, (3) what is his capacity for privation and hardship, (3) what are his loyalties and how strong are they, and (4) what are the cultural and historical contexts of the conflict in terms of value, motivation, and loyalty? In short, a psychological profile on

each major group within the state is required. As a minimum, those groups include the government, the military, and the people.[2]

This analysis should be ongoing for regions and states where the US can reasonably assume potential conflicts. Expertise very often exists but is organizationally isolated. Consequently, information is sometimes not shared. The obvious players for an integrated approach to develop the necessary strategic psychological analysis would include the following: the Department of State (DOS), and the Department of Defense (DOD); additionally the intelligence organizations should include: the Central Intelligence Agency (CIA), US Information Agency, Defense Intelligence Agency (DIA), regional and state specialists within these organizations, and the theater commander's political advisor (POLAD), as well as actual war planners.[3]

The products of the team analysis should be studies that psychologically profile each group within the state, and indicate potential vulnerabilities for exploitation. The process, while abstract, must move to the finite. What is required is a linkage between psychological vulnerabilities, operative psychological effects, and potential targets.

Given the desired psychological outcomes developed in chapter 5 and a methodology to derive these effects to targets, what then might a potential application of destructive PSYOPs look like?

Application of Destructive PSYOPs

The goal of this paper considered abstractly was to deduce material targets that can be inferred to affect the non-material realm of an opponent's moral forces. That goal is

realized in the form of three tables developed for this chapter that attempt to illustrate a working model of D-PSYOPs.

The Tables

The basis for having three tables each targeted at a different group within the state is grounded in the work of Carl von Clausewitz and his theory of a "paradoxical trinity" of war.[4] The key aspects of a state are embodied by its government, military, and people, Clausewitz's paradoxical trinity. In examining the tables the *italicized* psychological vulnerability or attribute is assigned to the far-left column which is linked to an operative method to act upon that psychological attribute. Finally, in the far right column a target is identified for attack to accrue towards the desired intent and method. Given the predominant similarities in the tables, *underlining* has been added to indicate differences between them.

Table 4. Destructive PSYOPs: *Government Leadership*

Intended Effect	Method/How	Targets
Create *doubt* about their cause	Isolate from other leaders. Isolate internationally. Input US/Coalition agenda (tell the truth).	Leadership and C3
Create *doubt* about state's capabilities	Degrade C3; take down defenses and strategic intelligence. Collapse economy	C3, air defenses, intelligence and economy
Reinforce *belief* in impending defeat (negative outcome)	Attack attributes of leader's belief in a positive outcome (ultimately-belief in national or personal gain and military forces)	Destroy state's physical means of resistance (military), degrade and disrupt their systems and controls (utilities, transportation, intelligence, state police) and supplies (food, water, fuel).
Demoralize	Create fear, anxiety, danger, chaos and privation (create sense of personal danger and hardship)	Target leadership, key figures and controlling influences. Destroy leadership facilities, systems and controls.
Shatter *cohesion* & instill *mistrust*	Isolate within and between levels. Create disharmony at all levels	C3, leadership, economy, and military forces.
Dissipate leadership's *will to resist*	By doing all the above and offering opportunities to negotiate a settlement	By attacking all above with intensity and persistence, allow no psychological breathing space.

Table 5. Destructive PSYOP: *Military Forces*

Intended Effect	Method/How	Targets
Create *doubt* about their cause	Isolate military from Gov. leadership. Input US/Coalition agenda (tell the truth).	Leadership and C3
Create *doubt* about military capabilities	Degrade his C3, take down his defenses and battlefield intelligence. Collapse economy	C3, air defenses, intelligence, and economy
Reinforce *belief* in impending defeat (negative outcome)	Attack attributes of military's belief in a positive outcome (ultimately-belief in cause, leadership and own military forces).	Destroy his physical means of resistance (equipment) and intelligence; deny military its essentials (food, ammo, fuel, oil, C3, and leadership)
Demoralize	Create fear, anxiety, danger, chaos and privation within individuals, units and forces.	Troops and military equipment (Military forces), supplies, economy
Shatter *cohesion* & instill *mistrust*	Isolate the enemy at all levels and between levels. Create disharmony at all levels.	C3, and leadership [national and military (strategic, operational, and tactical levels)]
Dissipate military's *will to resist*	By doing all the above and offering an alternative of surrender and fair treatment	By attacking all above with intensity and persistence, allow no psychological breathing space.

Table 6. Destructive PSYOPs: *Civilian Population*

Intended Effect	Method/How	Targets
Create *doubt* about state's cause	Isolate from leadership (civ/mil). Input US/Coalition agenda.	Leadership and C3
Create *doubt* about state's capabilities to achieve its aims and defend country	Degrade his C3, take down his defenses and selective public information. Degrade military forces. Collapse economy	C3 and air defenses, military forces, and economy
Reinforce *belief* in impending defeat (negative outcome)	Attack attributes of people's belief in a positive outcome (ultimately-belief in their cause, leadership and military forces)	Destroy their physical means of resistance (military) and interrupt their systems (utilities, transportation) and supplies (food, water, fuel).
Demoralize	Create fear, anxiety, danger, chaos and privation	Create privation by collapsing economy, interrupting their systems (utilities, transportation) and supplies (food, water, fuel).
Shatter *cohesion* & instill *mistrust*	Isolate the people from their leadership. Create disharmony with government ("Your Gov. started it your Gov. can end it").	C3, military and state leadership
Dissipate people's *will to resist*	By doing all the above and offering alternatives of peace and restoration of economy, systems and supplies.	By attacking all above with intensity and persistence, allow no psychological breathing space.

Summary of Tables

The major conclusions to infer from the destructive PSYOPs tables is to isolate the opponent's government, military, and population and to shut down as much communication and intelligence within and between levels as possible. This isolation creates doubt and uncertainty and begins to work against the opponent's will.

In order to enable freedom of action from the air an opponent's air defenses must be a beginning priority of the air campaign to open the door for follow-on selective attacks.

The grand strategic tradition of collapsing an adversary's economy has great psychological merit, it is demoralizing and it works upon national cohesion and begins to generate mistrust in pursuance of the war. Additionally, a *state's controls* in the form of information and its security police should also be targeted. In an effort to remove the state's control and begin to exert outside influence.

The enemy's military is a prime objective and one in which expectations of a positive outcome are most vested; destroy an enemy's military and we have gone a long way towards destroying their expectations of a positive outcome to the conflict. Indeed as a state's hostile ability is neutralized by and large his hostile will, will soon follow.[5]

Last and perhaps most controversial—attack the opponent's leadership, potentially to include the head of state. This is the most severe form of isolation, as the actual leadership is decapitated from its state. If the leader is the center of hostile will, as is the case in most police states this tactic offers a potential shortcut to conflict termination. The case for targeting leadership is examined briefly below.

Tailoring D-PSYOPs to Police States

Looking back over the last fifty years or so at the major conflicts the US has been involved in it appears that we go to war with predominantly totalitarian regimes (Nazi Germany, North Korea, Vietnam, and Iraq). These regimes are characterized by a central and strong controlling elite or individual. This tendency to centralize control of the state provides a prime vulnerability for exploitation.[6] Given this trend, the US would benefit from developing a special case study of the psychological profile and vulnerabilities of totalitarian regimes for exploitation by destructive PSYOPs.

Additional Considerations

There is a well-founded reluctance within all leaders and particularly the military to invest in decisions in which the outcome is uncertain. The more abstract the proposition the less disposed most leaders are to squander precious resources on its realization. Destructive PSYOPs is abstract in its intent to induce psychological effects, measuring progress in achieving the intended effects and resultant behavioral conditioning is difficult. For these reasons the indirect approach to warfare has a long road to travel to attempt to gain credibility prior to its acceptance and potential practice within force application. This limitation is understood and accepted, for now it is sufficient that its potential as a concept is examined, critiqued, and developed.

Summary

Psychological effects are real; they can be assessed and translated into targets for a strategic air campaign. The targets, once identified, are attacked with a focus on effects, not destruction. Psychological effects and their targets must be tailored to objectives and the unique nature of the enemy. Analysts and planners must strive to understand the psychological capabilities and limits of the government leadership, military forces and civilian population. Each group will have unique psychological vulnerabilities and physical infrastructure providing for individual targeting challenges. Opponent governments and their states are unique, and in particular totalitarian regimes need closer study.

Notes

[1] Joint Pub 2-0, *Joint Doctrine for Intelligence Support to Operations*, May 1995, IV-1. See also, Joint Pub 3-53, *Doctrine for Joint Psychological Operations*, July 1996, I-3, (Intelligence).

[2] An implied assertion and concept is that nations can be somewhat likened to individuals psychologically, and are therefore subject to manipulation and modification of their behavior by an application of psychological sticks and carrots. The idea of influencing the behavior of an individual put to a larger more diffused scale with a county, via its leadership and people.

[3] Leadership of such a diverse group of departments and agencies would be a challenge, but leadership is not as important as the principles of cooperation and coordination being the lead followed. The idea is not to establish another stovepipe, but to share existing information, and maintain updated profiles on selected opponents, focused on their psychological makeup, vulnerabilities, and potential effects. These profiles would then be available for periodic review and use by air campaign and other planners.

[4] Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, N.J.: Princeton University Press, 1976), 89. An interesting discussion of this trinity is found in Bruce A. Ross's, unpublished Naval War College thesis, "The Case For Targeting Leadership In War, (Newport, R.I., February 1992), 1. See also Handel, *Masters Of War*, page 63, footnote at the bottom of the page on various translations of the phrase "paradoxical trinity."

[5] The problem with this of course, is defeating the opponent's military force, places us back squarely in the lap of the direct approach. The difference is that this defeat is a result of cumulative psychological effects (degrading will) and destruction that isolates the force from communications and supplies. If we can erode an opponent's belief in a positive outcome then we begin to defeat their psychological impetus, their motive power (which is founded in a core belief of a positive outcome), their hostile will, and ultimately their will to resist.

[6] The reader is directed to two papers, one, that discusses the case for targeting leadership, and the other a legal analysis of that proposition. Both works make sound arguments for targeting leadership to include heads of state, and the legal analysis concludes that it would, in fact, be legal within the existing laws. Lt Cmdr Bruce A. Ross, "The Case For Targeting Leadership In War" (Newport R.I.: Naval War College, February 1992). Lt Cmdr Alvin W. Keller, Jr., "Targeting The Head Of State During The Gulf Conflict, A Legal Analysis" (Newport R.I.: Naval War College, May 1992).

Chapter 7

Conclusion

During World War II that particular technical aspect of strategic bombing operations which had to do with the selection of targets received a great amount of study and thought. Sound principles were developed by which production criteria, physical vulnerability, force requirements, and cost estimates could be analyzed in estimating the most desirable courses of action. It is suggested that these same techniques be applied to the enemy's will to resist, . . .

—Colonel Cecil E. Combs
The Air Offensive In Overall Strategy, 1948

Amazingly Colonel Combs described the need to attack an enemy's *will to resist* almost fifty years ago. The article is in part unsettling because the questions it asks as a form of research inquiry are echoed in this paper fifty years later: "what composes the will to resist; upon what moral and physical foundations is it based; where does it reside and where is it vulnerable, what are symptoms of its deterioration; what are the ways by which it can be overcome; is it always a real entity which *can* be attacked; and what is its relation to factors over which we have some measure of control?" The questions are still relevant the quest to attack an opponent's moral forces as well as his physical forces remains important.

Obviously, the quest is not an easy one, or by now there would be more answers and a greater understanding and exploitation of an opponent's psychological vulnerabilities, but the cause is no way diminished by the lack of understanding to date. In a small way,

this paper has attempted to advance that understanding just a little bit further, to begin to answer Colonel Comb's questions.

Benefits of an Indirect Approach

There is value in an indirect approach, in understanding an enemy's moral forces better. An increased emphasis on destructive PSYOPs in strategic attack is worth pursuing. If it is the nature of war, that the moral is to the physical as three to one, then we need to exploit that potential leverage.

The direct approach should not be abandoned while developing the indirect approach. The requirement to attack an enemy's physical force is well established and further confirmed within this paper. However, both approaches have benefits; both serve to weaken and coerce an opponent. We should do both, but do the indirect better by: (1) recognizing it (acknowledging need and benefit); (2) developing channels for available analysis on psychological aspects of an opponent to be available to air campaign planners; (3) develop an ability to translate an assessment of an adversary's moral forces and psychological aspects into targets for attack, as a means to defeat an opponent's hostile will; and (4) we need to think more in terms of influence than destruction.[1]

There is good reason for many war theorists and force application thinkers to have not attempted to describe in detail the moral forces of an opponent and name targets that can be directly associated to these moral forces. The reason is that the task is very difficult, because moral forces are largely within the province of the non-physical realm being mostly things of the mind, notions, thoughts and feelings (behavior). But to say they are important indeed potentially pivotal and not attempt to push further in defining

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them is not the answer either. By restating the importance of moral forces to the art of war, and attempting to describe the moral dimension just a little better than before, dialogue can be created and the potential for stimulating later insight is advanced.

Advocacy—Framework and Ideas for an Indirect Approach

This section explores a great many ideas and subsequent research questions in an effort to lay some of the conceptual framework for the indirect approach as well as provoke additional thought about it. The topics vary from influencing national resolve to a need for an Institute for the Application of Strategic Powers. All the topics and discussion relate directly to the central theme of this paper *psychological force application.*

In War, The State is More than Just its Military

Planning that goes beyond just considering an opponent's physical forces opens up more possibilities, more elements of the state to affect and influence. The state is made up of its people, its leaders, its businessmen, its religious leaders, its police, its media, etc., ad infinitum. In war, we are really engaging the whole country, and it is therefore limiting to think of only opposing the military. We are really trying to win over the entire country to our view, to our objectives, and to our outcome for the conflict. If we think in these terms–of the state as a whole, that can be acted upon as a whole (in parts) then we start to focus on a bigger picture with more possibilities to apply our influence (effects) and thereby affect the state's behavior.

The Ultimate Link is National Resolve

An argument can be made that the ultimate vital link, the ultimate node, the great connector is the leader's mandate (resolve)[2] to pursue his state's interest (aims). National resolve is just that, a firmness of purpose and determination, expressed collectively by the state. This expression is manifested in the people's obedience to the leader's will,[3] and their willingness to pursue the leader's means to the state's ends. However, the point is it originates from the leadership; the people may come to own the state's aims as their own but the plan and aims of the state, start at the top. How do we break the linkage? How do we intercede and put our own message into the network? How do we induce the leadership to communicate a new message, to cease the hostile pursuit of their aims, to give up their state's objectives?

Military forces in and of themselves do not have a mind of their own to fight. They are not individually purposed to resist and attack but are given purpose as a mandate of the state. We do not have to neutralize every military unit if we can change their orders, if we can affect the resolve upstream being communicated downstream.[4]

Not "Bang for the Buck" but "Psych[5] for the Bang"

The question is how to get the most psychological effect from your force application—not the old bang for the buck calculus but a new one of *psych for the bang*? How can we maximize the effects on leadership and people, to get them to lose interest in the fight and gain interest in a compromise or even your aims?

A way to maximize effects on the leadership and the people is to attack what makes up their belief in the conflict. What do they believe about the conflict? What do they think it is about? What motivates them to pursue it (territory, resources, revenge, loyalty,

duty, obedience)? I call this a *belief in a positive outcome*, if we can change that *belief* in a positive outcome, then we can begin to change motivation and thereby effect resolve (hostile will). So, if we could assign physical attributes to the state's "positive outcome" then we could systematically attack and destroy those attributes that make up the tableau of that positive outcome, and thereby destroy their belief in pursuing the conflict. If the conflict is going to have a negative outcome, and that outcome is being manifested then logically the cost is greater than the benefits and the new desire becomes to stop the costs−to halt the conflict.

Often the "Belief" is Based on a Confidence in Force

What if the state's belief in a positive outcome is vested in its armed forces, and in their ability to achieve their objectives. Given a state's belief in their forces, a possible solution presents itself, remove the state's belief in their armed forces and we significantly affect the collective belief of the state in achieving their desired outcome. The idea is that we have to demonstrate to the other state that ours is the superior force, that in fact we can overcome their forces. Put simply, their belief is in their forces, remove his forces and we remove his belief (in a positive outcome). A state's freedom of action (ability to pursue its objectives) is enabled by its military forces, this is why it comes down to military on military, force on force, it is the physical manifestation of the struggle between the wills of the opposing states. In war and conflict two wills battle, that is two militaries battle it out for dominance, this dominance manifested in the physical ability of one to impose on the other's will. They, who win, possess the greater

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ability to destroy the other, he who is the superior destroyer and killer and the more efficient remover.[6]

Destruction, Not to Destroy but to Affect Psychologically

If we knew we were not just "destroying something" but that we were "destroying it for an effect," would that change the way we approached its destruction? If the goal was to sway the state's collective psyche,[7] to induce a psychological change of heart and mind–would we destroy the same things and in the same manner? How can we link all destruction back to persuasion? The goal of destruction should not be physical removal so much as the measure of its psychological effect—its tilting of the mind and resolve.

What if We Could Make a Negative Future Credible?

What if one was told there was going to be a fight and they were going to be defeated? Would they still pursue the fight? Would they believe *the message of a negative outcome*? So it was with Iraq, what if we had told the Iraqis there was going to be a war, that they would lose 10-12,000 men and 2159 tanks,[8] and most of their nuclear capability, etc. (lay out the whole list of what will happen), would the Iraqis have been as willing to pursue the fight, particularly when we tell them we would only lose 142 men and 38 aircraft, etc.?[9]

If prior to a conflict we can express to an adversary state that they will experience a negative outcome (as a result of the conflict) and it is credible, then logically, why pursue the struggle; if your going to lose–why fight? This is the old cost versus benefit calculus. Is this calculus Western, or ethnocentric, forever unique and unknown but to the beholder? Is the idea of logic unique to cultures? Another way to frame this is why do

people and states act irrationally?[10] Given a credible future of great cost with little or no benefit why do people still pursue actions to a negative future outcome? Assuming a parallel in behavior between an individual and a state, this question is likened to why do people smoke, habit or is that they perceive themselves past a point of no return?

Capabilities Outstrip Intelligence

The future points to an even greater dependence on intelligence and analysis to make the enemy *known*. What motivates them, what are they after, what is their sense of value and loss, and what comprises their belief in a positive outcome?[11] How can we influence them, how do we direct our energies and destruction upon them? As our capabilities grow to inflict more accurate and lethal destruction (as well as non-lethal means) at a place and time of our choosing, *the precise what*, needs to grow with it. We may have awesome power, but what do we direct it upon to get the most effect, to render the greatest persuasive force, and to get the most psych for the bang quotient? We must bring in political and behavioral experts who know the nature (psyche) of our enemy. The way to his physical being is to get inside his head and change him there. Preserve his body and state, but change his mind.

Equal Parts, Sticks and Carrots

One can have the stick or one can have the carrot. Always keep the potential real that the stick can stop and a carrot awaits. Attackers need to keep the use of the carrot as credible as their willingness to use the stick.[12] Influence in its truest sense, is a behavioral approach; it is modifying (manipulating) conduct, to get the desired behavior. One gets a *cooperative partner* with praise and rewards (carrots) and a *wounded peer* with

condemnation and punishment (sticks). The challenge is how to finesse and minimize the use of violence in persuasion while maintaining a perception of restrained and over-whelming force?

Have to Live in the Neighborhood (End State)

In applying force if we kept the idea of having to deal with the enemy after the conflict as an equal or even as an ally it would put a different spin on that whole use of force. If we knew we had to live in the neighborhood, would we approach our interests with our neighbors in the same way and with the same means? The means have to be accountable to the end state; we cannot bully our neighbor and yet still expect their cooperation in the future.[13] Granted, this is a very simplistic analogy to international diplomacy and war; it does however seem to convey the new ethic of war to minimize casualties and damage, and the emerging supra-focus on the desired end state, and conflict resolution.

If we are all expected to mature as people as social beings, learning to subordinate our desires to the greater good of our partners, family, organization, and community, then to, should we expect states to mature to evolve in their international (world community) behavior. As states we need to cooperate and find compromises in our interests and a mutual respect for individual state differences. We all live in the shrinking neighborhood of earth. Nothing goes away without truly being resolved.

Need for Generalists Schooled in the "Art of Power"

It appears we need more of a blending of the IOPs, between in particular the political/diplomatic and military. The military is being asked more and more to be

mindful of the political context of a conflict and in particular of the end state. But the military is schooled in force not diplomacy, our expertise is in war not peace. We do not train to peace; we train to war. We do not have advanced schools of peace; we have War Colleges not Peace Colleges. We have a Fighter Weapons School not an Envoy Diplomacy School.

Yet, in today's environment of conflict where the lines are blurring between hostilities and politics we need individuals that are trained in the complete art of power. Individuals who understand all the IOPs that can move between the different instruments and know the strengths and limitations of each and when each or combinations thereof are appropriate. But the present training does not facilitate a complete understanding of the IOPs because the military and foreign services are strictly partitioned. We have the DOD and we have the DOS and very little linkage between them.

Further, if we accept that the economic and information dimensions are becoming more and more viable IOPs and therefore influence then the training needs to include the art of the Department of Commerce (DOC), and the art of the various intelligence agencies (DIA, CIA, Defense Information Systems Agency (DISA) and the National Reconnaissance Office (NRO) to name a few). The challenge is to blend the instruments, look at the word we choose even−*instrument*; where is the orchestration; where then is the practitioner that is accomplished in all the instruments; that virtuoso of power, where is the "music in the powers?" There is a need for an advanced school, focused on the joint application of the IOPs, an Institute for the Application of National Strategic Powers. The bottom line is we need to blend the understanding of, and gain more appreciation for, each instrument. We need to think more in terms of a blend and not a

binary code of 1s and 0s, it is not diplomacy or military it is perhaps "diplotary" or "militomacy." Play each power as needed or all four or just two, lead here–lead there but always the focus is on *persuasion,* on sticks and carrots to modify behavior to gain the desired end state and resolve the conflict.

Closure

To close, lets pull back and gain a larger perspective, one given by two great masters of warfare, Sun Tzu and Clausewitz. In a sense, they represent the paradigms of East and West; indirect and direct approaches to warfare. However, what is of particular importance is that both masters recognized a need for the other approach.

Sun Tzu emphasizes the indirect approach; the use of psychological means to undermine the enemy's will to fight. The great Eastern strategist offers this advice concerning the indirect approach: "He who knows the art of the direct and the indirect approach will be victorious. Such is the art of manoeuvring."[14]

Clausewitz as noted earlier put his stress on attacking an adversary's enemy forces, in a direct approach. Although he does not assign the same importance to the indirect approach, he still offers this as counsel for both approaches: "When we speak of destroying the enemy's forces we must emphasize that nothing obliges us to limit this idea to physical forces: the moral element must also be considered."[15]

Two great masters, two great forces and approaches to warfare, the challenge continues; to combine their truths (and others) into a coherent campaign–tailored to the situation, that multiplies our strengths and exploits an opponent's vulnerabilities using both lethal and non-lethal means of influence.

Notes

[1] By using the term influence, the idea of trying to move an opponent to our objectives rather than destroying them is kept more clearly in mind. It is a better concept to keep the idea of trying to achieve an end state relevant in a campaign, that is something is attacked for its effect, for its persuasive power, not as an end in itself.

[2] Random House Webster's College Dictionary, (New York, N.Y.: Random House, 1996). *Resolve*: To come to a definite or earnest decision about; determine. To convert or transform by any process. To settle, determine, or state formally in a vote or resolution. To deal with (a question, controversy, etc.) conclusively; settle. To clear away or dispel (doubts, fears, etc.); answer. Firmness or purpose of intent; determination.

[3] Ibid. *Will:* The faculty of conscious and particularly of deliberate action: *the freedom of the will*. Power of choosing one's own actions; to have a strong will. The act or process of using or asserting one's choice; volition: *the people are obedient to my will*. Purpose or determination: *to have the will to succeed.*

[4] This may sound like Information Warfare (IW), and if it does there is plenty of room (and synergy) for its application as a partner with force application. The actual intent is to convey once again, that effects targeted against leadership and the moral forces of the entire state hold great potential to collectively effect national resolve.

[5] Ibid. *Psych:* To intimidate or frighten psychologically (often followed by *out*). To prepare psychologically to be in the right frame of mind to give one's best (often followed by *up*). To figure out; decipher (often followed by *out*).

[6] This section supports a direct approach to war. However, the method need not be attrition as much as control (Deptula's concept of) of the opponent's military. Additionally, this supports air interdiction missions, and tasks whose objectives are the opponents physical forces (military). This is essentially, Pape's strategy of denial: ". . . target the opponent's military ability to achieve its territorial or other political objectives; thereby compelling concessions in order to avoid futile expenditure of future resources." Robert A. Pape, *Bombing To Win: Air Power and Coercion in War* (Ithaca, N. Y.: Cornell University Press, 1996), 19.

[7] Ibid. *Psyche*: the human soul, spirit, or mind. The mental or psychological structure of a person, especially as a motive force.

[8] Dr. Eliot A. Cohen, *Gulf War Air Power Survey, Vol II: Operations and Effects and Effectiveness*, (Washington, D.C.: Government Printing Office, 1993), 220.

[9] Ibid, 261. The 38 aircraft is out of the survey; the 142 men is this author's best recollection.

[10] For a look at why states act irrationally see *The March Of Folly*, by Barbara Tuchman.   Also look at Graham Allison's, *The Essence Of Decision*, for a few explanations why states *may appear* to act irrationally. An additional source that delves into the rational and irrational state actor process is Fred Charles Ikle's, *Every War Must End*, pages 14-16 and 96-105.

[11] Most of the intelligence described deals with *intent*; intent is best collected using Human Intelligence (HUMINT). Unfortunately, the trend in intelligence is moving away from HUMINT and towards an increasing reliance on imagery, signals, and orders of battle. This trend may prove costly as we become able to ascertain an enemy's

disposition and strength but not his intent. An additional observation is this could be pointing to another emerging trend that is emphasizing technology in war over the human element, indeed at times to even exclude it; the quantifiable over the qualitative, analysis over judgment.

[12] Col Phillip S. Meilinger, *10 Propositions Regarding Air Power*, (Air Force History and Museums Program, 1995). The idea of using airpower as a positive power and inducement is given some play in Col Meilinger's work: page 12, "Finally, it must be noted that air power has great strategic capabilities as a non-lethal force. In an interesting observation, John Warden noted that, basically, air power delivers strategic information: some of it is "negative" like bombs, and some is "positive" like food." The text goes on to use the Berlin Airlift as an example of a positive inducement. The idea is discussed again on page 47: "The airdrop of food to Muslims in Bosnia is an example of this trend [non-lethal weapons]. These 'food bomb' operations may become increasingly prevalent as our leaders turn to more peaceful applications of air power to achieve political objectives."

[13] For a discussion of the different potential end states and the peace they manifest between victor and vanquished see *War Ends & Means*, by Paul Seabury and Angelo Codevilla, pages 263-269. The authors describe three states of peace that ensue from war, in ascending order of desirability they are: the peace of the dead; the peace of the prison; and the peace of cultural conquest.

[14] Michael I. Handel, *Masters Of War: Classical Strategic Thought* (Portland, OR: Frank Cass & Co. Ltd., 1996), 76.

[15] Ibid., 77.

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