

**“The Enemy We Were Fighting Was Not What We  
Had Predicted.” What Is Wrong With IPB At The  
Dawn Of The 21<sup>st</sup> Century?**

**A Monograph  
By  
Major Lawrence T. Brown  
United States Army**



**School of Advanced Military Studies  
United States Army Command and General Staff College  
Fort Leavenworth, Kansas  
AY 03-04**

# SCHOOL OF ADVANCED MILITARY STUDIES

## MONOGRAPH APPROVAL

Major Lawrence T. Brown

Title of Monograph: "The Enemy We Were Fighting Was Not What We Had Predicted." What Is Wrong With IPB At The Dawn Of The 21st Century?

Approved by:

---

Thomas R. Gregory, LTC, SC

Monograph Director

---

Kevin C.M. Benson, COL, AR

Director,  
School of Advanced  
Military Studies

---

Robert K. Baumann, Ph.D.

Director,  
Graduate Degree  
Programs

# Report Documentation Page

Form Approved  
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE <b>26 MAY 2004</b>		2. REPORT TYPE		3. DATES COVERED -	
4. TITLE AND SUBTITLE <b>"The enemy we were fighting was not what we had predicted." what is wrong with IPB at the dawn of the 21st century?</b>				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) <b>Lawrence Brown</b>				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>US Army School for Advanced Military Studies, 250 Gibbon Ave, Fort Leavenworth, KS, 66027</b>				8. PERFORMING ORGANIZATION REPORT NUMBER <b>ATZL-SWV</b>	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT <b>Why has a S2 never won a war game when playing predicted enemy courses of action against a friendly course of action during the Military Decision Making Process (MDMP)? Why did the V Corps commander during Operation Iraqi Freedom (OIF) respond to a question about the threat by saying "the enemy we're fighting is different from the one we'd war gamed against"? Both these questions are troubling and lead to deeper questions about the process in developing enemy courses of action. This monograph will identify theoretical and analytical difficulties within current IPB doctrine. In addition, this document will show how these difficulties became institutionalized through Cold War realities within the Army intelligence estimate process. Historical evidence will be presented to support the claim that the identified difficulties are detrimental to Army operations in ambiguous and uncertain environments. Finally, this paper will present alternative theoretical constructs to the current IPB process for consideration in future IPB doctrine. The aim of this paper is to widen the scope of IPB doctrine to include other theoretical frameworks as tools for the Army intelligence officer and analyst as they consider the 21st Century threat facing them.</b>					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			

## ABSTRACT

“THE ENEMY WE WERE FIGHTING WAS NOT WHAT WE HAD PREDICTED.”  
WHAT IS WRONG WITH IPB AT THE DAWN OF THE 21<sup>ST</sup> CENTURY? by Major Lawrence  
T. Brown, United States Army, 45 pages.

Why has a S2 never won a war game when playing predicted enemy courses of action against a friendly course of action during the Military Decision Making Process (MDMP)? Why did the V Corps commander during Operation Iraqi Freedom (OIF) respond to a question about the threat by saying "the enemy we're fighting is different from the one we'd war gamed against"?<sup>1</sup> Both these questions are troubling and lead to deeper questions about the process in developing enemy courses of action.

This monograph will identify theoretical and analytical difficulties within current IPB doctrine. In addition, this document will show how these difficulties became institutionalized through Cold War realities within the Army intelligence estimate process. Historical evidence will be presented to support the claim that the identified difficulties are detrimental to Army operations in ambiguous and uncertain environments. Finally, this paper will present alternative theoretical constructs to the current IPB process for consideration in future IPB doctrine. The aim of this paper is to widen the scope of IPB doctrine to include other theoretical frameworks as tools for the Army intelligence officer and analyst as they consider the 21<sup>st</sup> Century threat facing them.

---

<sup>1</sup> William S. Wallace, quoted in Rick Atkinson, “General: A Longer War Likely,” *Washington Post*, Friday, 28 March 2003, A01.

## TABLE OF CONTENTS

APPROVAL PAGE .....	ii
ABSTRACT .....	iii
CHAPTER I—INTRODUCTION AND BACKGROUND.....	1
CHAPTER II—THE PATH TO INTELLIGENCE DOCTRINAL DIVERGENCE.....	6
Intelligence Doctrine circa World War II.....	9
Intelligence Doctrine post-World War II.....	10
Intelligence Doctrine and the post-Soviet Age.....	11
The Divergence of Intelligence Doctrine from Historic Precedence.....	12
Institutionalization of a Cold War Doctrine .....	15
CHAPTER III—THE DIFFICULTY WITH INTENTIONS.....	16
Cognitive Coping with Intentions .....	18
Intention Difficulty Acknowledged by Higher.....	18
Success Despite Intentions .....	20
The Problems with Intentions.....	22
CHAPTER IV—THE VIEW FROM THE OTHER SIDE .....	25
Intentions Equals Estimating Enemy Courses of Action—Really!.....	28
The Real Problem .....	31
CHAPTER V—RECOMMENDATIONS AND CONCLUSIONS .....	33
Recommendation I: Implement Other Contextual Frameworks for Analysis .....	35
Recommendation II: Saying What You Mean .....	40
Recommendation III: Re-implementing the Term Hypothesis .....	42
Conclusion.....	44
BIBLIOGRAPHY .....	46

## FIGURES

Figure 1: Intentions and Capabilities Importance Relative to the Levels of War.....	28
Figure 2: Four Levels of Uncertainty: Level 1 and Level 2 .....	37
Figure 3: Four Levels of Uncertainty: Level 3 and Level 4 .....	39

## CHAPTER ONE

# INTRODUCTION AND BACKGROUND

When an Army corps commander makes a statement like Lieutenant General (LTG) Wallace did describing major combat operations during Operation Iraqi Freedom (OIF): “The Enemy We Were Fighting Was Not What We Had Predicted,” it peaks ones intellectual and professional curiosity as a military officer.<sup>2</sup> It is incredulous that a general officer would make this statement considering that U.S. military intelligence intently studied Iraqi threat forces for Operations Northern and Southern Watch, Operation Desert Fox, and finally OIF—ten years of analysis. In terms of intelligence assessments, it also seems unusual that a S2/G2 generally never wins a war game when pitting predicted enemy courses of action against friendly courses of action during the Military Decision Making Process (MDMP). This becomes troubling and leads to deeper questions about the process of developing and predicting enemy courses of action. Operation Anaconda in Afghanistan and Task Force Ranger in Somalia offer other recent historical examples where the enemy surprised Army commanders at all levels despite a phenomenal advantage in technology, doctrine, and intelligence. These failures to anticipate commonly known as “intelligence failures” exacted payment from the United States and the Army in valued life and limb. What caused these intelligence failures? General Wallace’s statement alone demands consideration. Along with the intelligence failures in Afghanistan and Somalia, one begins to suspect deficiencies within the current intelligence estimate process known as Intelligence Preparation of the Battlefield (IPB). Are there theoretical and analytical deficiencies within the IPB process that have contributed to intelligence failures in recent major combat operations involving the United States Army? If there are deficiencies in the IPB process,

---

<sup>2</sup> William S. Wallace, quoted in Bob Kerr, “New commander discusses lessons learned in Iraq,” *Army News Service*, 02 September 2003, n.p., on-line Internet, 12 October 2003, available from [http://www4.army.mil/ocpa/read.php?story\\_id\\_key=5194](http://www4.army.mil/ocpa/read.php?story_id_key=5194).

then what solutions are available to correct these deficiencies? This monograph will attempt to identify critical theoretical and analytical deficiencies in current IPB doctrine. In addition, it will show how identified deficiencies became institutionalized within the planning process used by the Army. Moreover, recommendations will be made to correct any substantiated deficiencies found in intelligence doctrine. Finally, this paper will present other analytical techniques to the current IPB process for consideration by the U.S. Army in future IPB doctrine.

After a thirty-year absence in U.S. Army doctrine, prediction-based intelligence estimates reappeared in 1976 version of FM 100-5, *Operations*. This watershed document directed that “enemy intentions must be considered along with capabilities and probable actions.”<sup>3</sup> Almost at the same time, the commandant of the U.S. Army Intelligence School, Brigadier General (BG) Eugene Kelley directed the formalization of a deliberate and systematic process to understand terrain, weather, and the enemy “in order to elucidate the enemy’s probable course of action.”<sup>4</sup> Named Intelligence Preparation of the Battlefield or IPB, this formalized and systematic process was not necessarily new; however, it standardized the planning process used by S2/G2s at corps level and below throughout the Army. Published as doctrine in 1984 as part of FM 34-1, *Intelligence Electronic Warfare Operations*, IPB supported an important doctrinal rewrite of FM 100-5 *Operations* published in 1982. This document set forth fully the concept of “AirLand Battle” as the Army’s doctrine to defeat the Soviet land armies in Central Europe.<sup>5</sup> Indeed, the current forces fielded today are still “designed, equipped, and trained to confront a threat that

---

<sup>3</sup> U.S. Army, *Operations*, FM 100-5 (Washington, D.C: 1 July 1976), 7-13.

<sup>4</sup> U.S. Army Intelligence Center & Fort Huachuca, James Finely, ed., *U.S. Army Intelligence History: A Sourcebook* (Fort Huachuca, AZ: 1995), 411.

<sup>5</sup> Chapter 8 of the 1976 version of *Operations* introduced the concept of “Airland Battle;” however, it only described joint procedures between the Air Force and Army for cooperating in areas of mutual interest. The concept was not fully realized and developed as a way to conduct campaigns and battles until the 1982 version of *Operations*; See Paul Herbert, “Deciding What Has to Be Done: General William E. DePuy and the 1976 Edition of FM 100-5, *Operations*,” *Leavenworth Papers, Number 16* (Fort Leavenworth, Combat Studies Institute: 1988), 9, 98.

conducted highly centralized operations.”<sup>6</sup> Published as its own field manual in 1989, FM 34-130, *Intelligence Preparation of the Battlefield*, was designed specifically for the “requirements that have developed as a result from of the “AirLand Battle Doctrine.”<sup>7</sup> Since then, Army operations doctrine has evolved into “Full Spectrum Operations” while changes to FM 34-130 have been minimal. Instead, the IPB field manual has become more of a basics tutorial “...intended as a guide for applying the fundamentals of the IPB to any situation.”<sup>8</sup> Research has shown that doctrine, serving as a training or fundamentals guide, does not have a great impetus for change based on the uncertainty facing the organization responsible for developing and writing the doctrine.<sup>9</sup> In essence, IPB’s continual focus on basics has partly caused its incapacity to evolve and support the changing operations doctrine.

According to FM 101-5, *Staff Organizations and Operations*, “IPB supports the commander and staff and is essential to estimates and decisionmaking.”<sup>10</sup> IPB is also “the first step towards placing an operation within context.”<sup>11</sup> During mission analysis, the S2/G2 predicts enemy courses of action, arranges them in the order of probability, and presents the pertinent ones to the commander. Based on these predicted enemy courses of action, the staff develops the friendly course of action, the decision support matrix, the synchronization matrix, and the

---

<sup>6</sup> U.S. Army Training and Doctrine Command, *Objective Force Maneuver Units of Action*, TRADOC Pamphlet 525-3-90 (Fort Monroe, VA: 01 November 2002), 3.

<sup>7</sup> U.S. Army, *Intelligence Preparation of the Battlefield*, FM 34-130 (Washington, D.C: 23 May 1989), iii.

<sup>8</sup> U.S. Army, *Intelligence Preparation of the Battlefield*, FM 34-130 (Washington, D.C: 08 July 1994), Preface.

<sup>9</sup> This is due to uncertainty avoidance and the requirement of institutionalization. Organizations avoid uncertainty about the future by retaining doctrine and procedures that have proven themselves historically regardless of the current environment. This is why history abounds with armies fighting their last war. For further discussion about uncertainty avoidance and the requirement of institutionalization. See Graham T. Allison, *Essence of Decision*, (Boston: Little and Brown, 1971), 83; See also Kevin P. Sheehan, “Preparing for an Imaginary War? Examining Peacetime Functions and Changes of Army Doctrine” (Ph.D. diss., Harvard University, 1988), 30-34.

<sup>10</sup> U.S. Army, *Staff Organizations and Operations*, FM 101-5, (Washington, D.C: 31 May 1997), 5-6.

<sup>11</sup> U.S. Army, *Operations*, FM 3-0, (Washington, D.C: 14 June 2001), 11-9.

collection plan. Staff members integrate these products into an approved operation order, and then distributes it to subordinate units. If IPB is essential to all the command's estimates and decisionmaking, then the IPB process has a critical requirement to be logically and rationally sound, consistent with the theory and nature of war, and finally, objectively and historically aware. For IPB doctrine to exist otherwise increases the likelihood of intelligence and more importantly, mission failure.

Today, the Army is transforming the force based on an understanding that future enemies will be adaptive and unpredictable.<sup>12</sup> Meanwhile, IPB doctrine still directs intelligence officers to predict enemy courses of action based on enemy doctrinal templates. Just in these statements alone, there is an apparent contradiction. How does an intelligence officer predict an enemy acknowledged as unpredictable? In addition, IPB doctrine encourages intelligence officers to role-play the enemy commander.<sup>13</sup> This was an understandable practice when the U.S. Army stood opposed to a centralized and predictable Warsaw Pact army in Europe for forty years. Intelligence analysts focused on an easily tracked common conventional order of battle because it was so large and only changed incrementally over time.<sup>14</sup> Since Soviet doctrine, strategy, and disposition largely remained unchanged over a long period, it was convenient to develop a process to predict their intentions with relative ease on the Central European battlefield. In addition, capability and terrain severely limited Soviet conventional intentions on this particular battlefield. As a result, Warsaw Pact armies were restricted to certain avenues of approach based on their capabilities. The Army in Europe considered these limited enemy capabilities as limiting to Warsaw Pacts intentions. Therefore, the assessed narrow scoped intention of the Warsaw Pact

---

<sup>12</sup> U.S. Army, *Mission Command: Command and Control of Army Forces*, FM 6-0 (Washington, D.C: 11 August 2003), 1-10; FM 3-0, 1-8, 1-9.

<sup>13</sup> U.S. Army, *Intelligence Preparation of the Battlefield*, FM 34-130 (Washington, D.C: 08 July 1994), A-1.

<sup>14</sup> Bruce Berkowitz & Allan Goodman, *Best Truth* (New Haven: Yale University Press, 2000), 113.

based on its limited capabilities was to attack through the Fulda Gap in Central Europe.<sup>15</sup> This codified scenario drove U.S. Army doctrine, training, leadership development, organizational design, materiel, and soldier (DTLOMS) requirements until now.<sup>16</sup> However, this role-playing becomes questionable today when facing adaptive enemies more likely to implement asymmetric strategies and tactics — especially threats like the *Fedayeen* experienced by LTG's Wallace's units during OIF. Because of the nature of the organization, the *Saddam Fedayeen* did not use the same doctrine as the Iraqi Army or the Republican Guard. This highlights perfectly the difficulty of predicting different enemy courses of action for different units of capability and intentions within an enemy force. This problem is compounded when faced by potential threat countries across the globe each with their own unique capabilities and intentions. Originally designed to identify large enemy organizations from its parts, and the enemy intentions from a study of stable doctrine, long-term unit positioning, common equipment capability, and terrain limitations, the process fails today. It is an ineffective tool in identifying and determining intentions of a decentralized army with adaptive doctrine and different equipment capabilities from different countries located in different types of terrain. All this does not even take into consideration the human dimension of war to include cultural and psychological influences of a particular enemy, or the general uncertainty of human nature. Consequently, there is, prima facie, incongruence between today's operating environment and current IPB doctrine. The likely culprit is an IPB process that has outlived its usefulness in current form. This paper suspects that the aforementioned and other intelligence failures since the end of the Cold War were due partly

---

<sup>15</sup> Opposing armies both recognized that the shortest route from East Germany to the Rhine River was the Fulda Gap or Wetterau Corridor. Two major rivers and a maze of shipping canals with steep banks traverse the alternate avenue of approach, the North German Plain. The alternate route distance is approximately twice as long, and it reaches the Rhine where it is about twice as wide as compared to the primary route.

<sup>16</sup>.Huba Wass de Czege and Richard Hart Sinnreich, *Conceptual Foundations of a Transformed U.S. Army*, Land Warfare Paper Number 40 (Arlington, VA: AUSA, 2002), 9-10.

to an outdated and inherently flawed IPB process. If not corrected, these possible deficiencies within the IPB process will eventually lead to a military disaster of grand proportions.

## CHAPTER TWO

### THE PATH TO INTELLIGENCE DOCTRINAL DIVERGENCE

Doctrine and its associated TTP are procedural controls that provide, in terms of existing capabilities, a common approach to conducting operations. By their nature, they govern process rather than product or outcome. Doctrine is the most flexible; it deals with the fundamental principles that guide military actions. Doctrine includes a common language that enables all other methods of procedural and positive control.<sup>17</sup>

It was General DePuy, commander of the newly formed Training and Doctrine Command (TRADOC), who brought the importance of doctrine to the forefront of the Army's consciousness. Responsible for publishing the 1976 version of FM 100-5, DePuy managed to get the Army to define doctrine as "an issue of central importance to the Army and a key integrating mechanism."<sup>18</sup> Chief of Staff of the Army (CSA), General Shinseki, emphasized doctrine's importance in the 2001 version of *Operations*: "the Army is a doctrine-based institution" and that "Doctrine is an Army imperative."<sup>19</sup> If doctrine is a necessary component of the Army, then there must be criteria to measure the merit of accepted and published doctrine.

The critical criterion to determine the value of doctrine is rational soundness, historical awareness, consistency with the theory and nature of war, and congruency with reality on the battlefield.<sup>20</sup> It is important to establish these criteria and understand them in order to evaluate

---

<sup>17</sup> U.S. Army, FM 6-0, 3-20, 3-21.

<sup>18</sup> Paul Herbert, "Deciding What Has to Be Done: General William E. DePuy and the 1976 Edition of FM 100-5, Operations," *Leavenworth Papers, Number 16* (Fort Leavenworth, KS: Combat Studies Institute, 1988), 106.

<sup>19</sup> U.S. Army, FM 3-0, Foreword.

<sup>20</sup> These criteria were derived from John F. Schmitt, "A Practical Guide for Developing and Writing Military Concepts," Defense Adaptive Red Team (working paper for the Office of the Deputy Undersecretary of Defense for Advanced Systems and Concepts, Hicks and Associates, Inc. n.d.), 12-14; Sheehan, 15, 23-24.

current intelligence doctrine for inconsistencies. General Shinseki described the “soundness of doctrine” as being one out of six requirements for winning conflict.<sup>21</sup> According to the dictionary, soundness generally means that something—doctrine in this case—is “based on good sense and valid reasoning.” Soundness also relates to logic where a true conclusion follows from true premises.<sup>22</sup> In addition, doctrine should both be historically aware to include its own evolution and antecedents.<sup>23</sup> In essence, an “Army’s doctrine is inseparable from its past; therefore; rigorous study of the past is as important to articulating a credible doctrine”<sup>24</sup> The recently published FM 6-0 states the importance of military history as well: “Doctrine ... communicates the wisdom and judgment derived from past operations to the field.”<sup>25</sup> Next, doctrine needs to reflect a consistency with the theory and nature of war.<sup>26</sup> This criterion coincides closely with historical awareness. Since the fundamental nature and theory of war has not change dramatically over the last two centuries (students in military colleges still study the historic works of Clausewitz and Jomini), modern military doctrine is usually consistent with war’s enduring nature and theoretical underpinnings. When this criterion is applied, one can see whether new doctrine contradicts the consistent theory of war, or dramatically changes the nature of war to fit the doctrine. For the most part, the amount of new doctrinal changes to the theory and nature of war are not dramatic, but are usually minor ones on the periphery. This helps explain why war is more evolutionary as opposed to revolutionary, incremental as opposed to dramatic. Finally, doctrine should also respond to the contemporary environment. Its goal should be harmony with ongoing major combat operations or anticipating correctly the next major conflict. This goal of doctrinal congruency with current military operations is necessary to

---

<sup>21</sup> FM 3-0, Foreword; See also 1-18.

<sup>22</sup> Encarta World English Dictionary (1999), s.v. “soundness.”

<sup>23</sup> Schmitt, 18.

<sup>24</sup> Herbert, 107.

<sup>25</sup> FM-6-0, para. 5-20.

<sup>26</sup> For a discussion, see Schmitt, 13.

achieve maximum effectiveness during wartime. It is generally easier to obtain this congruence in wartime than in peacetime. In peacetime, an army attempts to change or adopt a new doctrine to face some projected threat. The failure to implement the correct doctrine against the next major foe is known as a failure to anticipate.<sup>27</sup> Usually, an army adopts a particular theory based on testing and experimentation through simulations, training centers, and military specific laboratories. However, once in major conflict and especially at the outset of hostilities, an army can determine rather quickly whether its doctrine is workable or useless. Useable doctrine is reinforced and improved while ineffective doctrine is replaced immediately. One example of this was in World War II, when new doctrine was rapidly developed by the U.S. First Army to overcome the challenges of fighting in the bocage after Operation Overlord when pre-invasion doctrine was found inadequate.<sup>28</sup> Another example occurred during OIF: “Contrary to doctrine, armor often moved swiftly through modern cities in Iraq without forward screening by infantry patrols.<sup>29</sup> To reestablish congruency between doctrine and reality in this case, Armor doctrine will have to be adjusted. In the broadest sense, U.S. Army intelligence doctrine is no different from other military doctrine. The aforementioned failure to anticipate is widely known as a failure of intelligence. This monograph will determine whether recent intelligence failures or failures to anticipate are causally related to poor doctrine that is not rationally sound, historically aware, consistent with the theory and nature of war, and congruent with reality on the battlefield.

---

<sup>27</sup> “Failures of anticipation may be best understood as doctrinal failures, using the term in the Soviet sense. Misfortunes of anticipation stem not just—and often not even chiefly—from failing to predict the specific action’s of one’s enemy, but from a failure to think through the sensitive issue of how well one’s own forces can react to an opponent’s style of warfare,” Eliot Cohen and John Gooch, *Military Misfortunes: The Anatomy of Failure in War* (New York: Vintage Books, 1990), 239.

<sup>28</sup> Michael D. Doubler, *Closing with the Enemy* (Lawrence, Kansas: University Press of Kansas, 1994), Chapter 2, “Busting the Bocage,” 34-68.

<sup>29</sup> Anthony H. Cordesman, “The Lessons of the Iraq War: Executive Summary,” Eleventh Working Draft (Washington D.C: Center for Strategic and International Studies, 21 July 2003), 62.

## Intelligence Doctrine circa World War II

It is important to understand the development of U.S. Army intelligence doctrine from its beginnings before World War II until the present. This historical overview of intelligence doctrine will assist in placing the research question of intelligence doctrine relevancy into context.

Although intelligence doctrine was not formally published as a field manual until 1940, it did exist through teachings at the Command and General Staff College and in other publications issued or sanctioned by the War Department. Before 1932, intelligence doctrine for the intelligence estimate focused exclusively on the enemy's "mission and intentions."<sup>30</sup> This doctrine evolved into "grouping all the maneuvers that an enemy might execute into a small number of wide and distinct hypotheses. These hypotheses are the enemy capabilities which the commander will consider in his estimate of the situation."<sup>31</sup> Published in 1940, the Army's first field manual on intelligence went one-step further with enemy capabilities: "A G-2 estimate of the enemy situation is an estimate made to determine the enemy capabilities, and when appropriate the priority in which he may adopt them."<sup>32</sup> This ranking of enemy capabilities was supported by the 1940 edition of FM 101-5, *Staff Officers' Field Manual, The Staff and Combat Orders*<sup>33</sup> as well as the majority of senior commanders and during World War II. In 1948, the Commandant of the Command and General Staff College, LTG M.S. Eddy conducted a survey of the most prominent general officers of World War II and their G-2s. In this survey, General Eddy asked if the "order of probability of adoption" component of the capabilities system of intelligence estimates should be eliminated from doctrine. An overwhelming majority of officers

---

<sup>30</sup> Edwin Schwein, *Combat Intelligence* (Infantry Journal Inc: Washington DC: 1936), 10.

<sup>31</sup> Ibid.

<sup>32</sup> U.S. Army, *Combat Intelligence*, FM 30-5 (Washington D.C:1940), 26.

<sup>33</sup> "A statement of relative probability of adoption of the foregoing lines of action when such statement can be justified," U.S. Army, *Staff Officers' Field Manual, The Staff and Combat Orders*, FM 101-5 (Washington D.C:1940), 91.

(31-2 among the general officers) not only concurred with keeping the ranking of enemy lines of action, but they also gave a vote of confidence to the capabilities system of developing intelligence estimates.<sup>34</sup> Unfortunately, the survey did not ask any questions concerning the intentions system of intelligence estimates.<sup>35</sup>

## Intelligence Doctrine post-World War II

Based on the Lovett report in 1945 and the feedback from the LTG Eddy questionnaire of 1948, the theoretical foundations of intelligence doctrine remained unchanged throughout the Korean and Vietnam wars, while military intelligence organizations and training grew substantially.<sup>36</sup> Interestingly, the 1951 version of FM 30-5 *Combat Intelligence* strongly cautioned commanders to “be certain they base their actions, dispositions, and plans upon estimates of enemy’s capabilities rather than estimates of enemy intentions.”<sup>37</sup> This emphasized discouragement of the intentions-based system followed closely on the heels of the intelligence failures of the year before.

---

<sup>34</sup> LTG Manton S. Eddy, “Enemy Relative Capabilities” (Unpublished survey of selected general and intelligence officers, Fort Leavenworth, KS: Commandant, U.S. Army Command and General Staff College, 28 July 1948).

<sup>35</sup> In the SAMS Monograph “Seeking a Theory of Tactical Intelligence to Support the AirLand Battle,” written by Major Richard Quirk in 1985, concluded that the most notable World War II generals and their S-2s “unanimously rejected a return to the Intentions System,”<sup>6</sup>. This conclusion was false. Nowhere in the questionnaire published by LTG Eddy did it ask about the Intentions system. The officers did affirm the retention of the capabilities system. However, this was by no means repudiation or a unanimous rejection of the intentions system. Major Quirk made an incorrect induction.

<sup>36</sup> The Lovett Board was a committee appointed by the Secretary of War to study War Department Intelligence Activities. It concluded, “There has been, at all levels, a lack of understanding of the proper function of intelligence. Primary emphasis has been put on furnishing conclusions as to enemy intentions rather than on presenting facts bearing on the enemy situation and capabilities. Commanders have expected intelligence sections to tell them what the enemy is going to do, instead of presenting the facts from which the commander might make the necessary determinations or assumptions, and intelligence officers have attempted to meet the requirement. In essence, the process has been one of transferring an important command responsibility from the commander to his G-2,” *Status of the Army Intelligence System* (Staff study, Washington D.C: Office of the Assistant Chief of Staff, G-2, 13 January 1954), Appendix B, Annex C, 2.

<sup>37</sup> U.S. Army, *Combat Intelligence*, FM 30-5 (Washington D.C:1951), 75.

In 1950, intelligence analysts concluded that North Korea did not intend to achieve its goals by an all-out attack, even though it had the capability to do so.<sup>38</sup> The issue of enemy intentions versus capabilities rose again a few months later when the Chinese invaded across the Yalu River. General Omar Bradley, the Chairman of the Joint Chiefs, testified to Congress: “we had the intelligence that they were concentrating in Manchuria... We had the information that they had the capability [to intervene].”<sup>39</sup> Despite this known capability, both the Eighth Army and MacArthur’s G2 assessed China’s intentions as staying out of the war — General MacArthur followed these intelligence officers’ faulty assessments.<sup>40</sup> Regardless of method used, the capabilities system of conducting intelligence estimates remained the doctrinal standard until the publishing of the 1976 edition of *Operations*. After forty-four years, the Army decided to return to the intentions-based intelligence estimate. This reversion to intentions-based intelligence estimates through the process of IPB was a watershed. It literally went against the doctrine and historical experience of World War II, Korea, and Vietnam.<sup>41</sup>

## **Intelligence Doctrine and the post-Soviet Age**

Today, approximately ten years after the end of the Cold War, the enemy intention requirement still holds true. The current operations field manual states, “Operational success requires identifying enemy capabilities (strengths and vulnerabilities), intentions, and courses of action.”<sup>42</sup> However, the doctrine does not explain why identifying enemy intentions contributes to operational success. It is interesting that the most recent IPB manual does not use the word

---

<sup>38</sup> U.S. Army, Finely, ed., 385.

<sup>39</sup> U.S. Congress, Senate, Committees on Armed Services and Foreign Relations, *The Military Situation in the Far East*, 82<sup>nd</sup> Congress, 1<sup>st</sup> Session, (Washington D.C: GPO, 1951),759.

<sup>40</sup> U.S. Army, Finely, ed., 384.

<sup>41</sup> Intention requirements within IPB doctrine did not minimize the importance of a capability assessment of the enemy. Both are required. Historically, this has always been true. When capabilities-based intelligence estimates were the preferred method, it precluded intention-based analysis. However, the converse was not true. Intention-based estimates still required capabilities-based intelligence estimates as point of departure for determining enemy intentions.

<sup>42</sup> U.S. Army, FM 3-0, 1-13.

“intentions,” but the word “prediction.”<sup>43</sup> The dictionary defines prediction, as “a statement of what someone thinks will happen in the future.”<sup>44</sup> From a military perspective, it includes forecasting the enemy’s aims or objective (i.e. intentions) as well as enemy courses of action. Unfortunately, there is a lack of consistency throughout current intelligence doctrine between the terms of prediction and intentions.<sup>45</sup> Although prediction is well defined in intelligence manuals, the concept of enemy intentions is not. Regardless, these concepts have remained constant in operations doctrine. Operations doctrine since 1976 has evolved from “Active Defense” to “Airland Battle” in 1982 to “Force Projection” in 1993 and to “Full Spectrum Operations” in 2001. Truly, operations doctrine has evolved from a tactical orientation in 1976 to an advanced theoretical construct in 2001, while intelligence doctrine has remained essentially the same.

### **The Divergence of Intelligence Doctrine from Historic Precedence**

Parting from historical tradition, the U.S. Army chose an entirely new way of fighting battles in 1976.<sup>46</sup> The new operations doctrine demanded that U.S. forces prepare to fight outnumbered and win and to win the first battle.<sup>47</sup> This resulted in persuasive arguments for changing intelligence doctrine from a capabilities system to an intentions system. The best explanation for turning from a forty-four year doctrinal standard for conducting intelligence estimates came from the landmark manual itself:

As Generals, Colonels, and Captains must continually be able to “see” the enemy across their areas of intelligence interest, they also need to think imaginatively in

---

<sup>43</sup> U.S. Army, FM 34-130, 08 July 1994.

<sup>44</sup> Encarta World English Dictionary (1999), s.v. “prediction.”

<sup>45</sup> Deputy Chief of Staff Intelligence, U.S. Army Training and Doctrine Command, “The Operational Environment and Threat,” 06 June 2001, 30, Powerpoint/on-line, Army Knowledge On-Line, 04 January 4, 2004, available from Knowledge Collaboration Center/ Army KCC Home/ Army Communities /Intelligence/ Intel Reference Files/ OPFOR & the COE/ COE Overview by DCSINT TRADOC – 06JUN01[01].ppt; *Intelligence and Electronic Warfare Operations* FM 34-1, (Washington, D.C: 27 September 1994) used the word “intentions” within context six times while the current FM 34-130 does not even mention it once.

<sup>46</sup> Donn A. Starry, “A Tactical Evolution—FM 100-5,” *Military Review* (August 1978), 3-4.

<sup>47</sup> U.S. Army, *Operations*, FM 100-5 (Washington, D.C: 1 July 1976), 1-2.

terms of what the enemy is doing. It can be assumed that all armies reveal activity patterns and deployment variations tied doctrinally to different tactical operations. However, commanders can no longer be satisfied with considering enemy capabilities and probable courses of action based on deductive analysis of past occurrences. Commanders must seek the enemy's intentions."<sup>48</sup>

Written with the most demanding mission of a Central European battlefield in mind, the new construct of active defense could not wait for a pattern analysis determined by enemy action to establish enemy courses of action and then ranking them. One could infer that by successfully seeking an enemy's intentions, a commander may preempt enemy action. This resulted in a requirement for rapid intelligence analysis to identify quickly the enemy main effort as far away as possible to give U.S. Army maneuver units time to shift laterally from across the front to mass. Still, the charge to seek enemy intentions was a statement with unforeseen ramifications for the future.

Since the context of the new FM 100-5 was Central Europe, its antithesis was the opposing force maneuver doctrine of the Warsaw Pact. It was this enemy doctrine, which provided the solution for rapidly determining enemy's intentions based on the following: "Location of certain emitters, in conjunction with other known to be organic to specific echelons, reveals a preparedness to pursue a given tactic."<sup>49</sup> For example, if intelligence collectors observed Soviet divisions massing at a certain location in conjunction with Soviet artillery groups moving forward to center themselves behind these massed divisions, then the enemy intention was to make a breakthrough attempt. This became the most probable course of action (COA), and there would be no need or time to analyze other COAs since the observed enemy disposition was the only one consistent with enemy doctrine in regards to a breakthrough attack. Based upon this determined intention, the new doctrine required the S2/G2 to develop an event template that would identify assumed future enemy key events based upon enemy doctrine. This would allow

---

<sup>48</sup> Ibid., 7-13.

<sup>49</sup> Ibid., 1-2.

the maneuver commander to preempt these key enemy events before they occurred. The event template also assisted in the creation of a decision support template to assist the commander in making critical decisions anticipated during the course of the battle.

As operations doctrine evolved to “Airland Battle” in 1982, which involved striking the enemy throughout the depth of the battlefield, the emphasis of knowing Soviet equipment and echelons grew in importance within the Army intelligence community. This resulted in the Army developing a special series of field manuals that focused exclusively on Warsaw Pact doctrine and equipment. S2s/G2s throughout the Army memorized Soviet equipment and formations in order to recognize tactical formations and intentions immediately.<sup>50</sup> Besides adjusting the Soviet and Eastern Bloc forces disposition to particular terrain (largely constant during the Cold War in Central Europe) and attempting to determine the time of the enemy attack, intelligence analysis became largely rote during the 1980s. It was not about analyzing enemy capabilities, but it was about identifying enemy dispositions and matching them to Warsaw Pact doctrine that gave enemy intentions. This changed at the end of the Cold War and the conclusion of the Gulf War.

Once the Soviet Armies left Central Europe, the Warsaw Pact disintegrated while the last of the large Soviet proxy armies were defeated during Desert Storm. Left without an enemy to fight its Cold War doctrine, the U.S. Army became victim to the peace dividend and suffered a one-third reduction. Historically, the Army has been most resistant to change during times of peace and this time it was no different. It was not until 1999 that CSA Eric Shinseki recognized the Army was in the midst of a strategic pause with an opportunity to change before the next inevitable conflict occurred.<sup>51</sup> A post-Soviet world had emerged with strong national movements and non-state actors. CSA Shinseki directed the development of FM 3-0 and “full spectrum

---

<sup>50</sup> If it is determined that an enemy intends to carry out an action, then that action becomes the most probable.

<sup>51</sup> General Eric K. Shinseki, speech, 122<sup>nd</sup> National Guard Association of the United States General Conference, Atlantic City, N.J., 14 September 2000.

operations” to deal with the new reality and the contemporary environment of the post-Cold War world. Still, current intelligence doctrine has essentially stayed with the paradigm of intelligence analysis based on determining enemy intentions through studying the enemy’s doctrine. Although IPB has become more liberal with promoting pattern analysis and analyzing multiple courses of action based on time available, there has been no serious reconsideration of the intentions-based system implemented at the height of the cold war to support a new and different warfighting doctrine.

### **Institutionalization of a Cold War Doctrine**

The U.S. Army operates in a fluid security environment at the dawn of the 21<sup>st</sup> Century. The evidence of the absolute presence and nature of this new security environment manifested itself in a successful attack upon America by international Al-Qaeda terrorists on September 11, 2001. The U.S Army has finally realized that it has many different potential enemies with different doctrine, culture, capability, and psychology. Current U.S. Army Training and Doctrine Command (TRADOC) doctrine purports that “While the enemy still retains the ability to fight in massed formations, they can no longer be depended upon to array themselves in predictable patterns.”<sup>52</sup> In apposition, the statement also says that the enemy can be depended upon to array themselves in unpredictable patterns. To compound the complexity of the problem, a TRADOC study concluded that potential threats are highly adaptable, and this translates into greater uncertainty on the modern battlefield.<sup>53</sup> Still, the current IPB doctrine directs soldiers to study

---

<sup>52</sup> TRADOC Pamphlet 525-3-90, 4.

<sup>53</sup> Deputy Chief of Staff Intelligence, U.S. Army Training and Doctrine Command, “The Operational Environment and Threat,” 06 June 2001, 30, Powerpoint, on-line, Army Knowledge On-Line, 04 January 4, 2004, available from Knowledge Collaboration Center/ Army KCC Home/ Army Communities /Intelligence/ Intel Reference Files/ OPFOR & the COE/ COE Overview by DCSINT TRADOC – 06JUN01[01].ppt., unclassified, slide 20.

primarily enemy doctrine through a linear battlefield framework, and to predict enemy courses of action and intentions through role-playing. To this end, the current IPB process is deficient.

The current IPB manual, FM 34-130, leads analysts to believe that any enemy problem is solvable due to the manual's flexibility to meet the commander's requirements.<sup>54</sup> This is true to a certain extent. However, when doctrine flexes so much that the result is unrecognizable to the original idea, then the authoritative and fundamental nature of doctrine is undermined. This bending of the IPB process is more often than not in recent history due to the divergent threats, while during the eighties the flexing of doctrine was the exception rather than the rule due to singular focus on the Soviet threat. In the final analysis, the operational environment is too dynamic to have a process like IPB in its current form. There is nothing critically wrong with the first three steps of the process. The major deficiency lies in the third step: "Determine threat COAs." There is little justification in continuing to determine enemy intentions since the initial reasons for changing it—operations doctrine for "Active Defense" and "AirLand Battle"—no longer exist. There must be an innovative and rational "IPB-like" way to support "Full Spectrum Operations" just as the newly developed IPB doctrine fully supported "Airland Battle" in 1984.

### CHAPTER THREE

## THE DIFFICULTY WITH INTENTIONS

The intention based intelligence estimate brought back as IPB after four decades to fight the Cold War in Europe has outlived its perceived usefulness. There has become a mismatch between the intention-based model of IPB and the Army operational environment. This has resulted in a growing imbalance between military art and science within military intelligence

---

<sup>54</sup> There is a contradiction. In the current FM 34-130, it claims that "the doctrinal principles of IPB are sound and can be applied to all situations at all levels," while in the preface it tells commander's to "apply the doctrine and information presented in this manual in any manner appropriate to their particular situation and mission." If the doctrine can be applied to all situations at all levels, then why would a commander need to apply it any differently?; U.S. Army, FM 34-130, 08 July 1994, iv, 1-4.

doctrine. The discontinuity is such that the value of IPB to the commander on the twenty-first century battlefield is questionable due to the difficulties found in the intentions model.

Major General (MG) Richard Quirk posed the following question while writing his School of Advanced Military Studies (SAMS) monograph in 1985: “Can we predict the future?”<sup>55</sup> Veritably, the answer is no. There is still no scientific proof that the future can be predicted with any certainty. History has repeatedly proven that we cannot predict the future any more than we can predict the stock market. If humans could accurately predict the future, there would be no games of chance, stock market, or military surprises. These three human activities exist because no one can accurately predict the future, or the intentions of human beings in carrying out a particular action. Reinforced by the writings of scientists as well as military theoreticians, one would think that the inability to predict the future is part of common sense.<sup>56</sup> Nevertheless, Army doctrine dictates that we must predict and seek intentions, so intelligence officers diligently attempt to do so. At times, the intelligence officer is correct with his prediction as a matter of probability. The opposite is true as well and the term intelligence failure becomes fashionable and recorded in the history books.<sup>57</sup> This results in tremendous pressure from superiors, doctrine, and history for intelligence officers and their organizations to do a better job predicting during the next operation.

---

<sup>55</sup> Richard J. Quirk, “Seeking a Theory of Tactical Intelligence to Support the Airland Battle” (SAMS monograph, U.S. Army Command and General Staff College, 1985), 12.

<sup>56</sup> Jomini’s described the utmost difficulty of gaining information on an adversary’s action; Baron de Jomini, *The Art of War*, trans. G.H. Mendell and W.P. Craighill (1862; reprint, Westport, CT: Greenwood Press Publishers, n.d.), 245, 250. Adding the human dimension to this, Clausewitz stated that “War is the realm of danger; therefore courage is the soldier’s first requirement.” Then he goes on to say: “Wherever decisions are based on fear or courage, they can no longer be expected to determine the probable outcome;” Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), 101, 168.

<sup>57</sup> Some infamous intelligence failings are the German Ardennes offensive in 1944, the Tet Offensive during the Vietnam War, the morale of the Iraqi armies in Desert Storm, and the disuse of Iraqi chemical weapons during Operation Iraqi Freedom.

## Cognitive Coping with Intentions

In order to cope with the impossibility of predicting the future, intelligence officers and organizations consciously or sub-consciously develop mechanisms to deal with the difficulty of producing accurate assessment of enemy intentions through predictive analysis. Dr. Ephraim Kam has captured these mechanisms in his book, *Surprise Attack*. In it, the professor describes the field of intelligence as so speculative that the typical analyst “feels that he must be vague in order to convey to the intelligence consumer a sense of inherent uncertainty surrounding the problem.”<sup>58</sup> Other research shows that intelligence predictions are usually reversible which causes intelligence analysts to become reluctant in making bold assertions.<sup>59</sup> This supports Dr. Kam’s observation that analysts will lower the likelihood or probability of an event occurring when pressured to give a clear and definitive estimate.<sup>60</sup> General Norman Schwarzkopf after Desert Storm criticized the intelligence community exactly for these reasons. He stated, “The analysis we received was unhelpful ... because it ended up being so caveated ... There were so many disclaimers that by the time you got done reading many of the intelligence estimates you received, no matter what happened, they would have been right.”<sup>61</sup>

## Intention Difficulty Acknowledged by Higher

Only joint doctrine addresses the challenge in determining enemy intentions:  
“Determining the adversary’s intent is the most difficult challenge confronting intelligence.”<sup>62</sup>

---

<sup>58</sup> Ephraim Kam, *Surprise Attack*, (Cambridge, MA: Harvard University Press, 1988), 28.

<sup>59</sup> Roberta Wohlstetter, *Pearl Harbor, Warning and Decision* (Stanford, CA: Stanford University Press, 1962), 395.

<sup>60</sup> Kam, 28.

<sup>61</sup> H. Norman Schwarzkopf, quoted in Congress, House, Committee on Armed Services, *Intelligence Successes and Failures in Operations Desert Shield/Storm, Report of the Oversight and Investigations Subcommittee of the Committee on Armed Services*, Committee Print, 103<sup>rd</sup> Cong. 1<sup>st</sup> Sess. (Washington D.C: GPO, 1993) 30. For further discussion see Anthony H. Cordesman, *Intelligence Failures in the Iraq War* (Center for Strategic and International Studies: Washington D.C., 16 July 2003), 21.

<sup>62</sup> Joint Chiefs of Staff, *Doctrine for Intelligence Support to Joint Operations*, Joint Publication (JP) 2-0 (Washington D.C: 09 March 2000) I-2.

The reason joint doctrine gives for predicting enemy intentions is to anticipate and plan detailed countermeasures to adversary action.<sup>63</sup> It is assumed that this reason holds true for Army doctrine as well, since it is not described other than a requirement for operational success.<sup>64</sup> Clearly, Joint Publication 2-01.2, *Joint Tactics, Techniques, and Procedures for the Joint Intelligence Preparation of the Battlefield*, is primarily based on the U.S. Army's *Intelligence Preparation of the Battlefield* field manual.<sup>65</sup> Unlike Army doctrine; however, Joint Publication 2-0, *Doctrine for Intelligence Support to Joint Operations* follows the prediction difficulty argument through to its logical conclusion thereby contradicting itself on its initial reason for making predictions:

The factor which makes this [Determining the adversary's intent] so difficult is the drawing of conclusions based upon the dynamic process of action and reaction between a joint force and its adversary. Clausewitz referred to this as the 'process of interaction.' He believed that "the very nature of interaction is bound to make it unpredictable."<sup>66</sup>

If there is a requirement to determine intentions, and intentions are based on the Clausewitzian "process of interaction," which are bound to unpredictability, then it is not possible to predict intentions. This was a simple matter of logic recognized by Clausewitz, realized by our theorists in the 1930s, followed by our generals during World War II, and lost during the development of "Active Defense" and "Airland Battle."

Army intelligence doctrine leads to the contradiction found in joint doctrine. In the Army's primary intelligence manual, FM 34-1, *Intelligence and Electronic Warfare Operations*, it differentiates intelligence between the three levels of war: strategic, operational, and tactical. In the manual, one finds prediction as a descriptor of intelligence at the strategic and operational

---

<sup>63</sup> Ibid., I-1.

<sup>64</sup> U.S. Army, FM 3-0, 1-19.

<sup>65</sup> The process between IPB and joint IPB (JIPB) is identical; See U.S. Army, FM 34-1, 27 September 1994, 1-1; Joint Chiefs of Staff, *Joint Tactics, Techniques, and Procedures for Intelligence Preparation of the Battlespace*, Joint Publication (JP) 2-01.3 (Washington D.C: 24 May 2000), II-1.

<sup>66</sup> JP 2-0, I-2.

level of war but not at the tactical level.<sup>67</sup> This is unusual because IPB was developed specifically as a process to predict enemy courses of action before they occurred. In addition, the IPB manual states, “the doctrinal principles of IPB are sound and can be applied to all situations at levels.”<sup>68</sup> If the principle of prediction is sound and can be used at all levels of warfare or command, then why is prediction not used as a primary descriptor of intelligence at the tactical level? Perhaps there is no truth to the notion of determining enemy intentions as a requirement for tactical success.<sup>69</sup>

### **Success Despite Intentions**

It will prove helpful to look at recent military history and see if knowing the enemy’s intent contributed to operational success. The first historical example to consider is Desert Storm. We did not know Saddam’s plan or intentions in 1991. The United States did not know if he was going to invade Saudi Arabia after seizing Kuwait. Certainly, he had the capability to do so, even after the 82<sup>nd</sup> Airborne Division deployed a brigade to Saudi Arabia to help defend it.<sup>70</sup> The ability to predict the intentions of Saddam or his military forces was irrelevant since outcome would remain the same. The coalition who stood opposed to Saddam prepared for every contingency whether Saddam intended to use all of his capabilities or not. Additionally, Task Force Ranger in Somalia did not predict or know that Somali warlord Mohamed Farrah Aidid was going to make a stand against U.S. forces when the opportunity presented itself. However, the Task Force commander did understand the capability of the Somali militia to conduct an organized operation near Bahara Market in Mogadishu. He accepted the risk of it occurring

---

<sup>67</sup> U.S. Army, FM 34-1, 27 September 1994, 2-3.

<sup>68</sup> U.S. Army, FM 34-130, 08 July 1994. 1-4.

<sup>69</sup> U.S. Army, FM 3-0, 1-19.

<sup>70</sup> In the speech, where CSA Shinseki announced Army transformation, he commented on the incredulity of Saddam’s actions in 1991: “And for reasons we still don’t know today, he stopped at the Saudi border;” General Eric K. Shinseki, speech, 122<sup>nd</sup> National Guard Association of the United States General Conference, Atlantic City, N.J., 14 September 2000.

despite the exclusion of critical AC-130 “Specter” gunships by Defense Secretary Les Aspin.<sup>71</sup> Similarly, U.S. forces did not understand Al Qaeda’s and the Taliban’s intentions during Operation Anaconda in Afghanistan. In fact, the predicted enemy course of action was for the enemy to flee upon contact. Instead, the least likely COA occurred according to the intelligence products—the enemy defended.<sup>72</sup> Still, the outcome of the fight remained the same. The plan was adjusted to reality, the enemy was eventually defeated, and intelligence failures were highlighted. Operation Iraqi Freedom is one last example of the irrelevancy of determining enemy intentions as a requirement for tactical success on the battlefield. U.S. military intelligence widely guessed the enemy intentions consistently wrong in regards to the use of chemical weapons during the march towards Baghdad. Commanders at the highest levels believed based on intelligence that the Iraqis intentions were to use chemical weapons once U.S. forces came within striking distance of the capital.<sup>73</sup> Something is amiss when a deputy combatant commander makes the following statement: “it is perplexing to me...that we have found no weapons of mass destruction, when the evidence was so pervasive that it would exist...I can’t offer a reasonable explanation with regard to what has happened.”<sup>74</sup> Like Desert Storm a decade earlier, the U.S. forces were prepared for this possibility whether it occurred or not. When

---

<sup>71</sup> Major General William Garrison, commander of Task Force Ranger, wrote in memo a few weeks before the Battle of Mogadishu: “If we go into the vicinity of the Bakara Market, there’s no question we’ll win the gunfight, but we might lose the war;” qtd. in Mark Bowden, *Blackhawk Down* (New York: Atlantic Monthly Press, 1999), 21, 335.

<sup>72</sup> This is based on an unclassified AAR Powerpoint presentation by 3<sup>rd</sup> Brigade, 101<sup>st</sup> Airborne Division. Slide #54 graphically portrays the most likely enemy course of action titled “ECO A 1 (Most Likely) Escape;” and slide #55 graphically portrays the least likely enemy course of action titled “ECO A 2 (Least Likely) Defend/Attack;” “OEF-3<sup>rd</sup> Bde, 101<sup>st</sup> (AASLT) Anaconda AAR,” *U.S. Army Knowledge Collaboration Center*, 82, on-line, Army Knowledge On-Line, 04 January 4, 2004, available from Knowledge Collaboration Center/ Army KCC Home/ Army Communities/ Intelligence/ Intel Reference Files/ After Action Reviews/Operation Enduring Freedom/ OEF - 3rd Bde, 101st (AASLT) Anaconda AAR.ppt.

<sup>73</sup> John Abizaid quoted in Senate, *Nomination of LTG Abizaid to be Appointed to the Rank of General and Commander of USCENTCOM*, 25 June 2003, n.p., on-line, Internet, 26 January 2004, available from <http://www.centcom.mil/centcomnews/transcripts/20030605.html>.

<sup>74</sup> Ibid.

one surveys the history of tactical intelligence, an inverse relationship becomes apparent. The more ambiguous and uncertain the operational environment, the less predicting, assuming, or determining enemy intentions will contribute to operations. However, the less ambiguous or uncertain the environment, the more utility predicting, assuming, or determining enemy intentions has.

## The Problems with Intentions

It is true, that for an enemy to carry out an intention, he must have the capability to do so. However, the converse is not true. As described earlier, an enemy may have the capability to conduct military operations, and yet not execute them for reasons of his own. Brigadier General (BG) Koch, General Patton's G2 during World War II understood this thoroughly: "For Intelligence purposes, only one thing counts: capabilities."<sup>75</sup> One must give credence to BG Koch's idea since he was one of the few officers not deceived by the German's build-up opposite of the Ardennes in December 1944.<sup>76</sup> Both General Eisenhower's and Bradley's intelligence staffs wrongly judged the Germans intention as one as reinforcing a defense opposite where the Americans were strongest.<sup>77</sup> BG Koch felt strongly about not determining enemy intentions because "Intelligence errors in combat, if serious, were measured in terms of lives lost. If they led to wrong tactical decisions, an intelligence officer was readily available to reassignment."<sup>78</sup> Fifty years later, the G-2 of the 24th Infantry Division (Mechanized) during Desert Storm had the exact same view: "it was unnecessary and dangerous to base combat decisions on such predictions."<sup>79</sup> As G2, Lieutenant Colonel (LTC) Richard Quirk—now a major general—was

---

<sup>75</sup> Oscar W. Koch, *G2: Intelligence for Patton* (Philadelphia, Pennsylvania: Whitmore Publishing Company, 1971), 43.

<sup>76</sup> Carlo D'Este, *Eisenhower: A Soldier Life* (New York, Henry Holt and Company, 1992), 640.

<sup>77</sup> Koch, 109.

<sup>78</sup> *Ibid.*, 133.

<sup>79</sup> Richard J. Quirk, "Intelligence for the Division: A G2 Perspective" (An Individual Study Project, U.S. Army War College, 1992), 4.

convinced that the capabilities system “helped the commander to focus on his plan and the risks that threaten it, rather than encouraging him to center on what he thinks the enemy will do.”<sup>80</sup> Consequently, according to the research Dr. Kam conducted, “intentions are more difficult to follow, and estimating them may result in total failure while estimating capabilities may lead to only partial failure.”<sup>81</sup> Moreover, history has shown that “the enemy’s actual capability of launching an attack is often unknown, even to himself, until the moment of attack ...”<sup>82</sup> Neither BG Koch or LTC Quirk found it necessary to predict enemy intentions in order for their respective units to achieve success during combat operations.

Intentions are not always as simple as determining an enemy’s objective or his courses of action as directed by doctrine. Modern U.S. military operations are based on full spectrum dominance, which includes the considerations of force projection and seeking dimensional superiority at the outset of combat operations.<sup>83</sup> This rapid conduct of war, once started, makes determining an enemy’s intentions especially difficult, if not impossible. Most countries do not intend nor have the capability to fight the United States. Modern day foes are regional hegemonists with regional military intentions. Their war fighting doctrine remains conventional and constant as they seek to dominate neighbors. Once the U.S. military enters the conflict, the threat conventional doctrine will experience a metamorphosis into adaptive operations characterized by creativity, opportunity, tailoring, and defensive adaptability.<sup>84</sup> This is a matter of survivability to the threat since the threat knows that it cannot challenge the U.S. military on a conventional footing. This may help explain LTG Wallace’s difficulty with the *Saddam Fedayeen*. The corps commander’s war game was based on the *Fedayeen*’s presumed doctrine

---

<sup>80</sup> Ibid.

<sup>81</sup> Kam, 57.

<sup>82</sup> Ibid.

<sup>83</sup> Joint Chiefs of Staff, *Doctrine for Joint Operations*, Joint Pub 3-0 (Washington D.C: 10 September 2001), IV-4

<sup>84</sup> Deputy Chief of Staff Intelligence, TRADOC, slide 20.

and historical patterns of operation. All this changed once combat operations commenced. The *Fedayeen* then forsook doctrine and historical operating methods and adopted adaptive operations. Still, IPB doctrine directs that “each threat COA must be consistent with the threat’s doctrine.”<sup>85</sup>

Assumed rationality of the enemy’s intentions is not enough to determine enemy courses of actions (COAs). Doctrine dictates that selected enemy COAs requires evaluation on their feasibility, acceptability, and suitability.<sup>86</sup> However, the enemy may evaluate its own COAs according to entirely different criteria. In describing the enemy’s conceptual framework, Dr. Kam observed:

Yet explaining an enemy’s behavior as rational on his own terms is difficult because it involves understanding his different conceptual framework. The actions and intentions of the enemy are likely to appear strange, irrational, and unpredictable in terms of one’s own conceptual framework; any rational explanation requires considerable knowledge and imagination and sound intuition.<sup>87</sup>

It is in knowledge, imagination, and sound intuition where military intelligence analyst’s skills are lacking.<sup>88</sup> Ultimately, an enemy will not choose a course of action perceived to be most rational to us, but one that will further the perceived values of the enemy most. Unfortunately, these values often change based on various internal and external influences i.e. Clausewitzian friction.

Friction and uncertainty is unavoidable in war. Therefore, attempting to control the tactical battlefield by attempting to discern the enemy’s intentions is a fruitless endeavor. The art of military intelligence is not guessing as some believe, the art of military intelligence is realizing the scientific uncertainties and cognitive difficulties of predicting future events on a singularly

---

<sup>85</sup> FM 34-130, 08 July 1994, 2-42.

<sup>86</sup> Ibid.

<sup>87</sup> Kam, 65.

<sup>88</sup> CALL Newsletter, “Operation Outreach,” No. 03-27 (Fort Leavenworth, KS: Center for Army Lessons Learned, October 2003), 6-7.

unique battlefield. It is also perceiving, as close as possible, reality on the battlefield for the commander as well as identifying risks to the commander as he conceptualizes future operations. The art of war concerning intelligence is not to reduce uncertainty as much as it is to manage it.

## CHAPTER FOUR

### THE VIEW FROM THE OTHER SIDE

In the course of research, one finds the opposing camps between capabilities and intentions-based intelligence. However, the gulf between the two camps is not that far apart. They are, in fact, right next to each other. A well-documented dispute that is highlighted in Dr. Kam's research, and is best described in an essay by Israeli intelligence expert Shlomo Gazit: "Sure enough there are two opposed conceptions of the role intelligence within the decision-making process. One exclusively limits it to a presentation of the picture with regard to the enemy; the other sees intelligence as a full and active member in proposing courses of action..."<sup>89</sup> The capabilities side of the argument is one of exclusion where the intention side is of inclusion. Writers with expertise in intelligence have documented this dispute well in writings over the last century.<sup>90</sup> Interestingly, the intention advocates claim the U.S. Army has been practicing intention-based intelligence all along. Still, by understanding the intention perspective, one can make a better and balanced assessment on the effectiveness of the current IPB process.

Upon closer observation, one finds that the dispute came from the opposite levels of war. The capability side of the argument originated from the tactical level of war while the intentions

---

<sup>89</sup> Shlomo Gazit, "Intelligence Estimates and the Decision-maker," *Leaders and Intelligence*, ed. by Michael I. Handel (London, England: 1989), 270.

<sup>90</sup> See Edwin E. Schwein, *Combat Intelligence: It Acquisition and Transmission*, (Washington D.C: The Infantry Journal Inc., 1936), 8-18; Elias Carter Townsend, *Risks: The Key to Combat Intelligence* (Harrisburg, PA: The Military Service Publishing Company, 1955), 22-31; Forrest Lamar Davis, "Predictive Intelligence: Do We Really Need It," *Military Intelligence* 23, no. 2 (April-June 1997): 30-32; Michael I. Handel, *War, Strategy, and Intelligence* (London, England: Frank Cass and Company Limited, 1989), 239-240; Kam, 57-82.

argument began from the strategic side. For the Army, most writings in the twentieth century focused on the tactical level and indeed; Army doctrine has developed from the tactical level up. The two primary intelligence manuals, FM 34-1 and FM 34-130, evolved from FM 30-5, *Combat Intelligence*. This tactical intelligence manual stayed true to its capability-based prejudice from 1940 until 1984. Determining enemy intentions has always been a critical requirement to strategic intelligence, but its estimates and processes were not formalized entirely until the creation of the Central Intelligence Agency (CIA) and the requirement to produce the National Intelligence Estimate (NIE).<sup>91</sup> One of the most compelling arguments for considering enemy intentions was presented in a Naval War College pamphlet published in 1958 called “Background to Decision Making.” It claimed:

Any study of decision-making as a process of dealing with uncertainty makes it clear the capabilities and intentions of an opponent are simultaneously taken into consideration. A decision maker does not select one as his basis and excludes the other. The real thing to look for is the weighting that is given to two interlocking sets of factors.<sup>92</sup>

In the Navy’s view, the consideration of intentions and capabilities are not mutually exclusive, but each is considered based on the situation. In strategic situations, it may be more important to consider intentions. For example, what are the intentions of Colonel Qaddafi, leader of Libya, when he publicly forsakes his WMD program? Is it to curry favor with the international community who is now prejudice with developing nations having WMD; or is it a “red herring” to deflect covert production or storage of forbidden weapons? Other possibilities may explain his behavior as well. Knowing current capabilities has nothing to contribute when a leader makes a statement about a future action he intends to take. Still, a rational assessment is required on

---

<sup>91</sup> *Sherman Kent and the Board of National Estimates: Collected Essays* (Washington D.C: CIA, Center for the Study of Intelligence, 1999), *The Institutional Framework , Words of Estimative Probability*, n.p., on-line, Internet, 24 February 2004, available from <http://www.cia.gov/csi/books/shermankent/toc.html>.

<sup>92</sup> U.S. Naval War College, “ *Background to Decision Making* (Newport, RI: 1958), A-1.

Qaddafi's intentions for the future so national decision makers can make U.S. policy. Clearly, in this case, intentions become more important than capabilities. On the other hand, General

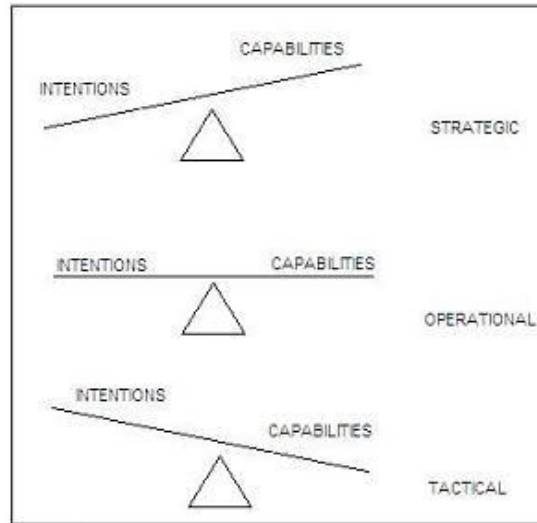


Figure 1: Intentions and capabilities importance relative to the levels of war.

McCaffery, commanding general of the 24<sup>th</sup> Infantry Division (Mechanized) during Desert Storm, did not care about assumed enemy intentions so much when planning his attack into Iraq; instead, he was more concerned with the Iraqis capabilities and locations.<sup>93</sup> This weighting between intentions and capabilities is best understood using Figure 1.<sup>94</sup> It is a simple representation of the importance of capabilities and intentions relative to the different levels of war. A general observation, it is supported by military history of the last seventy years. The late Dr. Michael Handel, a recognized and respected scholar in the field of intelligence, supports this view of a mutual relationship between intentions and capabilities.<sup>95</sup> Dr. Handel claimed, “all information

<sup>93</sup> Quirk, “Intelligence for the Division: A G2 Perspective,” 170, 247.

<sup>94</sup> Developed by the author of this monograph.

<sup>95</sup> This mutual relationship is not correlated because an enemy with weak capabilities may still have the intention to conduct offensive operations.

gathered by intelligence concerns either the adversary's intentions or his capabilities."<sup>96</sup> He also believed that "even the most secretive leaders can provide intelligence analyst with clues to their intentions in earlier memoirs, speeches, briefings in closed or open circles, and the like."<sup>97</sup> History has shown this to be true. Still, Dr. Handel agreed that intelligence on enemy capabilities were much easier to obtain than intelligence on intentions, and that intention intelligence primarily focused or weighted at the strategic level; "War and surprise attack are determined not by the existence of capabilities *per se*, but by the political intention to use them."<sup>98</sup> This means that enemy tactical units usually follow the strategic and operational intentions of their superiors. If these higher enemy intentions are known, it is not unreasonable to assume the enemy tactical intentions of attacking or defending. However, if the enemy strategic intentions are unknown or wrongly assessed, this can cause great risk to the tactical commander. This is why commanders naturally weigh the importance of enemy capabilities greater at tactical level then opposed to enemy intentions. There is too much uncertainty otherwise.

### **Intentions Equals Estimating Enemy Courses of Action—Really!**

The intention advocates believed that the Army has always practiced intention-based intelligence even before the intention directive in 1976. Indeed, intelligence estimates and IPB doctrine historically directed analysts to evaluate and prioritize each enemy course of action.<sup>99</sup> However, before 1976, the Army saw intentions and estimating enemy courses of action as separate and discrete actions.<sup>100</sup> This belief generally held true until the late 1950s and early 1960s, when research started to challenge this common belief. In fact, a U.S. Navy publication defined intentions as: "Basing a plan on what one believes an enemy will do, or attempting to

---

<sup>96</sup> Handel, War, *Strategy and Intelligence*, 239.

<sup>97</sup> *Ibid.*, 241.

<sup>98</sup> *Ibid.*, 239, 240.

<sup>99</sup> U.S. Army, FM 34-130, 08 July 1994, 2-44.

<sup>100</sup> U.S. Army, FM 30-5, *Combat Intelligence* (Washington D.C:1951), 72-75.

predict which one of several capabilities an enemy will select...”<sup>101</sup> Other research supported this definition or one similar to it. If this definition was true, then the Army has been determining intentions since the inception of intelligence doctrine. Essentially, seeking enemy intentions and predicting enemy courses of action was the same thing.

Today, confusion is caused when Army doctrine states “success requires identifying enemy capabilities (strengths and vulnerabilities), intentions, and courses of action.”<sup>102</sup> This statement still implies that the two are mutually exclusive when they are not. Other Army doctrinal manuals differentiate the two actions as well. Remember, the specific task to “seek enemy intentions” was an imported concept into Army doctrine in 1976, while the task of “determining and prioritizing enemy courses of action” has always been a part of Army doctrine. Instead of combining the two tasks into the same term, they just left them. No one has made the effort to restate the requirement as “seek enemy intentions **to include** enemy courses of action.”<sup>103</sup>

Intention-based intelligence is not consistent throughout Army doctrine. Actually, there is a noticeable lack of continuity through intelligence doctrine in regards to the use of the word intention and its relationship to other similar words like prediction, estimation, assumption, and threat model.<sup>104</sup> Still, the critics of intention intelligence are purists. They believe that the system of determining enemy intentions needs elimination, and replaced by a system that describes enemy capabilities and locations only. Their argument focuses on the impossibility of predicting the future and the high risk of cognitive error associated with attempting to predict the future. The reasons against intentions ring true; however, it ignores that fact that humans, as part of daily

---

<sup>101</sup> U.S. Naval War College, *Sound Military Decision* (Newport, RI: 1958), 140.

<sup>102</sup> U.S. Army, FM 3-0, 1-13.

<sup>103</sup> Emphasis added.

<sup>104</sup> There is no rhyme or reason to terminology such as “intention” in doctrine; neither is it defined. FM 34-130 makes no mention of “intentions” and favors the word “assumption” or “threat model” when talking about estimating enemy actions.

routine, estimate or predict the future when facing an uncertain environment. Just like intelligence analysis, “we organize the possibilities in a situation as well as we can from the information we can collect and process; and then we invariably consider the probabilities as well before we decide to act.”<sup>105</sup> This premise causes one to look at the capability-based argument a little closer only to discover further evidence supporting the intention-based advocates claim.

The argument between intention and capability diminishes when one reviews history and discovers that both sides have always considered intentions and capabilities. Incredibly, the capability advocates and purists even admit to determining or estimating enemy courses of action. For example, Patton on July 16, 1944, asked his G2, a famous capability advocate, “If I attack Arigento, will I bring on a major engagement?” Colonel Koch responded, “No Sir.”<sup>106</sup> The G2 made this prediction or estimate based on an extensive analysis of the Germans capabilities to include strength, location, terrain, weather, morale, and pattern analysis. COL Koch advocated capability intelligence as strongly as he did because it gave the G2 the wherewithal to make a difficult perception judgment about a future event. This takes into account that detailed analysis of the enemy was something the commander cannot accomplish on his own due to time constraints. Even the most famous advocate of doing away with intentions and prioritizing enemy COAs, then Colonel Elias Carter Townsend, practiced estimating enemy intentions. In his book, *Risks: The Key to Combat Intelligence*, Colonel Townsend recommended to the Army to drop the relative probability of adoption procedure but he also stated, “Contradictory as it seem (*sic*) there is a time when a G2 can be, should be, and completely proper in predicting.”<sup>107</sup> In reality, there is no argument whether intentions or capabilities need primacy in doctrine. Indeed, the experts have missed the issue.

---

<sup>105</sup> U.S. Naval War College, *Background to Decision Making* (Newport, RI: 1958), A-2.

<sup>106</sup> Koch, 42-44.

<sup>107</sup> Townsend, 28.

## The Real Problem

The real issue is not whether one uses intentions or capabilities, history proves that analysts used both methods. The true argument is the forum where the discussion of intentions occurs. This is the only difference between the intention and capability camp. The intention advocates do not see a problem publishing predicted enemy courses of action and ranking them according to relative probability in the intelligence estimate. However, the capability proponents claim that predictions on enemy intentions are confidential between the S2/G2 and commander. In their view: “THERE IS A DIFFERENCE BETWEEN BEING THE INTELLIGENCE OFFICER OF A COMMAND AND BEING THE OLD MAN’S (COMMANDER’S) INTELLIGENCE OFFICER (SIC).”<sup>108</sup> The capability supporters believe that the commander conceptualizes the future through his intent and visualization, while the intelligence officer only assists the commander in conceiving the future.<sup>109</sup> In addition, the capability adherents separate the intelligence estimate of the S2/G2 between the command and the commander. This view has the command (i.e. staff and subordinate units) needing the facts of enemy capabilities to accomplish their mission, while the commander is the only one who receives enemy intentions as well as capabilities. In other words, the S2/G2 is only required to portray an accurate perception of the enemy to the subordinate units, while the commander receives a perception and a conception about the enemy from the intelligence officer. By doing this, the intelligence officer brings the commander’s perception about the enemy as close to reality as possible, and assists the commander in conceptualizing future enemy actions for integration into the larger concept of future operations. The commander then publishes these conceptions about future enemy and friendly operations in his commander’s estimate. According to capability advocates, the

---

<sup>108</sup> Ibid.

<sup>109</sup> Quirk, “Intelligence for the Division: A G2 Perspective,”5-10.

commander's estimate is the only estimate.<sup>110</sup> In their view, the staff's primary purpose is to assist the commander to perceive the current situation as accurately as possible, and to help him conceptualize the future for subsequent or alternate operations. In this way, the staff integrates their informal estimates into the overarching and definitive "commander's estimate." This method directs that risks and assumptions about the future are not the staff's responsibility to make, but the commander's.

The opposing view of intention-based intelligence is a reasonable one. Predicting the future is an innate human function, banning it formally from doctrine would not necessarily prevent its use. However, there is utility in regulating proposed enemy intentions in regards to planning military operations. Again, Figure 1 maybe helpful. At the higher levels of warfare, operational and strategic, predictive intelligence estimates take on relative greater importance, since they support planning and execution of campaigns and major operations. National decision makers also consult with the estimates as they make policy. At these levels, intelligence officers are true experts with many years of experience to include their own skilled intelligence staffs and multi-faceted collection capability. At the strategic and operational level, the commander relies on this expert intelligence more than he would at the tactical level where the intelligence officer is extensively junior to the commander in both expertise and experience. The most junior intelligence officers who are required to determine enemy intentions might only have two to four years in the military in comparison to the battalion commander's two decades. In this case, a battalion commander would be wise to manage his inexperienced S2's conceptions about the enemy, and have him focus primarily on the enemy capabilities. Still, when looking at intention intelligence from a broad perspective, it is well established, theoretically sound, and historically based. It is probably too extreme to recommend its eradication. Instead, there is a need to

---

<sup>110</sup> Quirk, "Intelligence for the Division: A G2 Perspective," 166-167.

manage these intelligence constructs in new and different ways not yet considered to support commanders more effectively at all levels.

## CHAPTER FIVE

### **RECOMMENDATIONS AND CONCLUSIONS**

The question asked at the beginning of this monograph was whether there were theoretical and analytical deficiencies within the IPB process that have contributed to intelligence failures in recent major combat operations involving the United States Army? By following the history of the intelligence estimate and IPB, it was determined that any deficiency found centered on the issue of enemy intentions. Additionally, research demonstrated that the historic and habitual way of conducting intelligence estimates according to doctrine and combat experience prior to 1976 was weighted in favor of determining enemy capabilities. After 1976, the new intelligence estimate, or IPB, was predicated on the new operations doctrine of “Active Defense” and later, “Airland Battle.” The certitude of the Central European battlefield weighted IPB in determining enemy intentions. Since then, the U.S. Army has faced a wide array of threats across the spectrum of conflict. Against these myriad threats is where IPB’s deficiencies made itself known. Instead of creating a new process that specifically addressed the vagaries of the new environment, the intelligence doctrine writers decided to modify a doctrine optimized for the Cold War with patches and add-on techniques, tactics, and procedures (TTP) to meet current intelligence requirements. Within IPB doctrine, one can find special sections dedicated to air defense IPB, special operations IPB, humanitarian and disaster relief IPB.<sup>111</sup> These IPB add-ons are not frameworks for analysis but checklists for consideration in addition to the main process as

---

<sup>111</sup> U.S. Army, FM 34-130, 08 July 1994, 4-1, 4-17, 6-1.

described in Chapter 2 of FM 34-130. Unfortunately, the next version of IPB, currently in its draft form, shows no major changes in the way it evaluates the battlefield and enemy.<sup>112</sup>

The current IPB field manual is deficient on whole due to its design as a narrowly focused process adapted to many uses over an extended period. Moreover, there is evidence that points to a correlation between narrowly focused intelligence doctrine to analysts' deficiencies as well as military intelligence equipment drawbacks.<sup>113</sup> This monograph recognizes the requirement for a scalable analytical process designed to meet the challenges of adaptable and decentralized enemies as well as the conventional threats we have faced in the past. The IPB manual states in its opening paragraph, "IPB is the best process we have for understanding the battlefield and the options it presents to friendly and threat forces."<sup>114</sup> IPB was a useful process that served the Army well; however, one must always seek a better process for "stagnant doctrines may lead to disintegration. They may also lead to defeat on the battlefield."<sup>115</sup>

One only has to look to the business community, a dynamic and innovative environment, for fresh ideas. The business world and its supporting educational institution like the Harvard School of Business spend a great deal of time and money in researching and developing better business models to stay competitive in a dynamic and fluid world market. The international business environment is not unlike the current operational environment facing the Army. Both are adaptive and highly ambiguous. Also like the Army, the business community deals with uncertainty constantly. This is most commonly experienced in stock markets and while entering new markets. To help them plan for an uncertain future, the business world uses different models that provide frameworks for analysis.

---

<sup>112</sup> US Army Intelligence Center and Fort Huachuca, *Intelligence Preparation of the Battlefield*, FM 2-01.3, Initial Writers Draft (Fort Huachuca, AZ: 21 February 2003).

<sup>113</sup> Ralph Peters, "Military Intelligence: The Broken Branch." *Army Times*. 13 April 1998: 35.

<sup>114</sup> U.S. Army, FM 34-130, 08 July 1994, 1-1.

<sup>115</sup> Barry R. Posen, *The Sources of Military Doctrine* (Ithaca, NY: Cornell University Press, 1984), 221.

## Recommendation I: Implement Other Contextual Frameworks for Analysis

The *Harvard Business Review* published an article called “Strategy Under Certainty” based on research by McKinsey & Company, a leading management consultation firm.<sup>116</sup> This article presented alternate future models for uncertain business environments. This article was so insightful that the Naval War College received permission to reprint it in their *Strategy and Force Planning* book used in its force-planning curriculum. Upon closer examination, this article has analogous applicability to intelligence estimates as well as force planning strategy.

The premise of the article is that most businesses develop future strategies using traditional models to include discussing alternative future scenarios with the goal of finding the most likely outcome, and basing a strategy on it. This is very similar to the IPB process the Army now uses. However, the authors of this article recognize that this traditional approach works best in only relatively stable business environments. The writers also believe that the traditional business approach for estimating the future leads business “executives to view uncertainty in a binary way—to assume that the world is either certain, and therefore open to precise predictions about the future, or uncertain, and therefore completely unpredictable.”<sup>117</sup> This business observation runs parallel to the traditional IPB process that leads one to believe that a very precise prediction is attainable. This was true during the Cold War, which corresponds to the stable business environment highlighted in the article. To avoid the two extremes of thinking about the future, the article presents four conceptual models that help business executives determine “the level of uncertainty surrounding strategic business decisions and for tailoring strategy to that uncertainty.”<sup>118</sup> These models would assist the S2/G2 to decide the type of environment his unit is facing. Is it a stable environment where traditional IPB process may work, or is it a highly

---

<sup>116</sup> Hugh Courtney, Jane Kirkland and Patrick Viguerie, “Strategy Under Certainty,” *Harvard Business Review*, November/December 1997, 66-79.

<sup>117</sup> Courtney, 36.

<sup>118</sup> *Ibid.*, 37.

adaptive and unique environment where another planning tool maybe more useful in conducting in intelligence analysis?

#### Four Levels of Uncertainty: Level 1 and Level 2

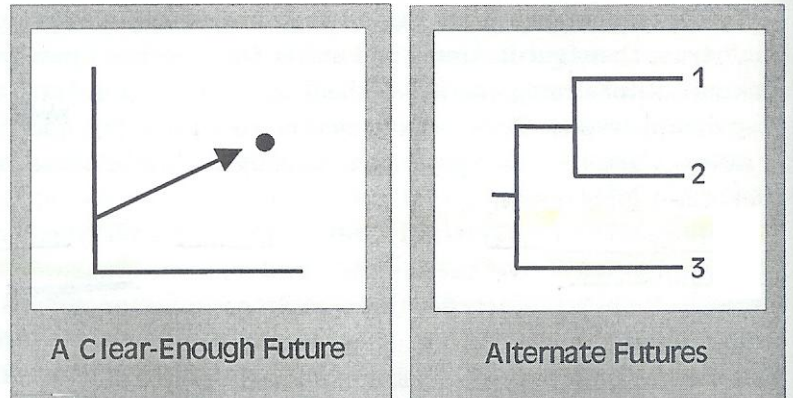


Figure 2

“A Clear Enough Future” and “Alternate Futures” are the first two models presented in Figure 2.<sup>119</sup> The “Clear Enough Future Model” represents a single forecast or a single enemy COA certain enough to determine a plan to defeat it. The optimized analytic tool for the certain future is the IPB process. Since the environment is stable in this model, the enemy will follow the established norms of their doctrine and capabilities. An example of this was the Cold War. The Central European environment was relatively stable over many years while the enemy focused on a highly centralized command and control structure, which caused them to rely heavily on their warfighting doctrine. As demonstrated earlier, this certain environment allowed intelligence officials to predict a clear future in case of hostilities.

The next model is “Alternate Futures,” which shows that a few discrete outcomes will define the future. This model best describes the IPB model the Army uses today. Since analysts

---

<sup>119</sup> Ibid., 38.

cannot identify which outcome will occur for certain, they establish a relative likelihood based on induction or deduction. These common analytic methods provide a most likely and most dangerous COA that helps the commander to "...selectively apply and maximize his combat power at critical points in time and space on the battlefield."<sup>120</sup> However, there are other models of analysis that are available in this level of uncertainty such as alternative competing hypothesis (ACH), or Bayesian analysis, and game theory.<sup>121</sup> The campaigns that fit the alternate future model were Operation Just Cause in Panama, and Operation Restore Democracy in Haiti. Circumstances such as military capabilities and geography of the target country greatly limited the enemy COAs to a discrete few in each of these operations.

Beginning with "a range of futures," the next two models shown in Figure 3 represent the environment in increasing uncertainty. "A range of futures" model is significant because it does not have natural discrete enemy COAs usually found in historic military examples. Operation Allied Force in Kosovo was a perfect example of this particular model. NATO planners assumed that Serbia had a discrete number of options available to it, when in fact they had a range of futures available once NATO political leaders removed ground invasion as a military option early on. This may help explain why a five day planned air campaign turned into a seventy-day air war. Task Force Ranger in Somalia experienced an uncertain environment where the enemy had a range of futures to decide on to include defying American special operating forces. In this case,

---

<sup>120</sup> U.S. Army, FM 34-130, 08 July 1994, 1-1.

<sup>121</sup> "ACH is a tool to aid judgment on important issues requiring careful weighing of alternative explanations or conclusions. It helps an analyst overcome, or at least minimize, some of the cognitive limitations that make prescient intelligence analysis so difficult to achieve." Richard J. Heuer Jr., *Psychology of Intelligence Analysis* (Washington D.C: CIA, Center for the Study of Intelligence, 1999) chap. 8, n.p., on-line, Internet, 26 January 2004, available from <http://www.cia.gov/csi/books/19104/index.html>. Bayesian analysis is an observation-based inquiry founded on Bayes' Theorem, "A theorem of conditional probability that allows estimates of probability to be revised continually based on observations of occurrences of events." Encarta World English Dictionary (1999), s.v. "Bayes' Theorem." Game theory is "a mathematical theory primarily concerned with determining an optimal strategy for situations in which there is competition or conflict, such as in business activities or military operations," Encarta World English Dictionary (1999), s.v. "Game Theory."

“The Range of Futures” available to the Somalis militia were not properly taken into consideration. The same argument can be made with Operation Anaconda. The air assault brigade S2 used an analytical model used for a discrete number of alternative courses of action. However, the Al Qaeda and Taliban forces had more than a few discrete COAs available to them. Due to the lack of intelligence and the great uncertainty on the battlefield, it was impossible to predict in this situation a likely enemy course of action. Because of the ambiguity of the situation and the wide range of COAs available to the enemy, doctrinal IPB would not be optimum in this scenario. Examples of analytic tools for “a range of futures” scenario are assumption-based

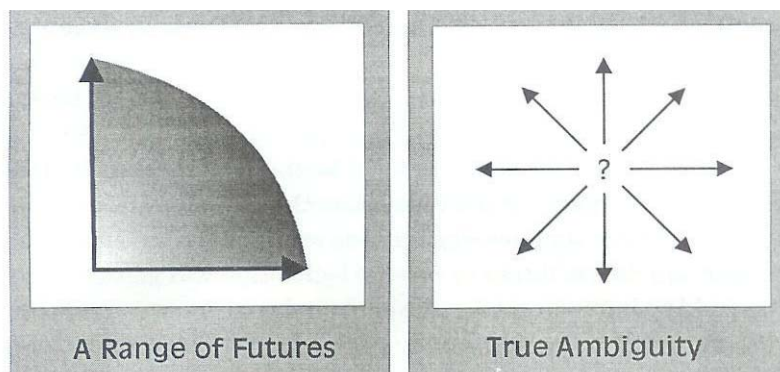


Figure 3

planning, pattern analysis, and disparity analysis.<sup>122</sup> As the situation in a particular area of interest becomes clearer through intelligence collection, it may be possible to move back to the level 2 uncertainty model.

---

<sup>122</sup> The RAND Corporation designed assumption-based planning for the Army. This model is predicated on the inevitable change of an organization plans based on a highly uncertain future. James A. Dewar et al., *Assumption-Based Planning: A Planning Tool for Very Uncertain Times* (Santa Monica, CA: RAND, 1993); Pattern analysis identifies indicators of enemy action based on historical observation. It is based on the premise that the enemy’s COA results in certain characteristic patterns if identified and correctly interpreted. U.S. Army, *Intelligence Analysis*, FM 34-3 (Washington, D.C: 15 March 1990), 6-9. Disparity analysis is comparing one’s analysis and judgments with that of another analyst with a different background and viewpoint. R.V. Katter, C. A. Montgomery and J.R. Thompson, “Human Processes in

Best used in situations never before experienced with no basis to forecast the future, the fourth planning model, “true ambiguity” describes well the current Global War on Terrorism. It is virtually impossible to predict accurately the range of potential outcomes or even the scenarios that might occur within a range of futures. A more useful example of true ambiguity was the opening months of Operation Enduring Freedom. No one knew or even guessed the future when small teams of Special Forces soldiers were inserted into a thoroughly unpredictable environment. Many expert opinions predicted limited success or abysmal failure similar to the Soviets fifteen years earlier. However, no one predicted the unparalleled success of the unconventional warfare campaign linked to close air support operations. After the fall of the Taliban and Al Qaeda in Afghanistan, future enemy scenarios became less ambiguous where this model was no longer applicable. Today, most operations in Afghanistan operate within level 1 or 2 uncertainty models since the enemy and the environment has been refined over the last two years. In an environment experiencing true ambiguity, the best tools for analysis are pattern analysis, non-linear dynamic models, and historic analogous referrals. As in the other models, it will be possible to move from Level 4 uncertainty to less uncertain levels as time progresses and intelligence becomes more available.

The reason for this recommendation to implement other contextual frameworks for intelligence analysis is to match the most effective analytical tools to the correct environment of uncertainty. Just as the IPB process was the optimal process for the Cold War battlefield, the intelligence doctrine writers must optimize, teach, and publish different analytical processes for each of the levels of uncertainty that the U.S. Army faces today. By doing this, a unit of action S2, for example, can select the level of uncertainty he faces, and then apply the appropriate analytical tools towards it. IPB is not a cure all, it is a process or a tool used to maximize

Intelligence Analysis: Phase I Overview,” Research Report 1237 (Woodland Hills, CA: Operating Systems Inc., December 1979) 7-5, 7-6.

information about a potential enemy within a particular operational environment. When this environment changes, then another tool or process best suited for the different or new environment needs implementing.

## **Recommendation II: Saying What You Mean**

Army doctrine writers use some intelligence terms haphazardly with little consideration towards consistency throughout. The different smattering of similar but different analytical terms among the foundational manuals most often used lead to ambiguity and confusion on the part of intelligence personnel and leaders alike. Due to the difficulty and tentative nature of intelligence analysis, the terms used for this conceptual work require precision in meaning. Unfortunately, Army intelligence doctrine today is full of highly ambiguous terms like “predictive analysis” for example. Even with the word “intentions,” this monograph showed there has been a considerable amount of confusion to its meaning and purpose. If FM 34-130 is indeed a fundamental guide to IPB, then it has a requirement to define explicitly the standard terms of intelligence analysis for the entire Army.

At first glance, there seems to be unity among the terms used by critical intelligence doctrine and the important Army capstone documents. Consistency through out doctrine is important to avoid confusion and to maintain authority. For example, FM 3-0 defines the term assumption or estimate as “...information a commander wants to know but cannot know with certainty.”<sup>123</sup> This seems to align with the statement found in FM 34-130 that states, “Remember that the threat COAs you identify are *assumptions* about the threat, *not facts*. Because of this, you cannot predict with complete accuracy which of the COAs the threat will employ.”<sup>124</sup> Based on this sentence, an intelligence officer could make the statement that all proposed enemy COAs are

---

<sup>123</sup> FM 3-0, 11-13.

<sup>124</sup> U.S. Army, FM 34-130, 08 July 1994, 2-44.

assumptions. This seems reasonable in light of the arguments set forth in this monograph. However, another important doctrinal manual, FM 101-5, *Staff Organization and Operations* states, “The G2 (S2) must communicate the enemy commander’s presumed concept of operation, desired effects, and intended endstate.”<sup>125</sup> In this instance, the word assumption or estimate is not used; instead, the word presumed is used. The word presumed, not defined by doctrine, is defined by the dictionary as “to accept that something is virtually certain to be correct even though there is no proof of it, on the grounds that it is extremely likely.”<sup>126</sup> In this case, presumption connotes more certainty than the word assumption. If the staff field manual just used the consistent word assumption, defined in FM 3-0, there would have been no ambiguity to whether a S2/G2 must assume or presume about the enemy commander. Still, it is unreasonable to believe, and history supports this notion as demonstrated by this paper, that the S2/G2 cannot determine the future with virtual certainty as the staff planning doctrine charges intelligence officers to do in using the word presume. This is just one example of how doctrine is not consistent in its terminology especially in managing intelligence terms.

Interestingly, the word assumption which is synonymous with the word presume in the dictionary has special problems of its own. Defined by the dictionary, assumption is “something taken for granted: something that is believed to be true without proof.”<sup>127</sup> This dictionary definition of the word assumption connotes certainty like the synonymous twin presumption. However, this is not consistent with the definition as presented in FM 5-0, which implies uncertainty. If one definition connotes certainty while the other one implies uncertainty, then they are in conflict with each other, which cause confusion among its users. If a commander uses the dictionary definition, then he may expect the S2/G2 assumptions of the enemy to be certain to occur. However, if the commander stays with the definition within the doctrinal text, he would

---

<sup>125</sup> U.S. Army, FM 101-5 (Washington, D.C: 31 May 1997), G-6.

<sup>126</sup> Encarta World English Dictionary (1999), s.v. “presume.”

<sup>127</sup> Ibid., s.v. “assumption.”

know that the enemy assumptions are probable and not certain. Furthermore, if one accepts the dictionary definition of assumption where “something is believed to be true..,” then a logical discrepancy occurs among the selected enemy COAs to be published in the intelligence estimate. To wit, if the most likely enemy COA is assumed or considered true and the most dangerous course of action is also assumed or considered true as defined by the common definition of assumption, then it is not possible to have two discrete courses of action considered as true. One must be considered true and one must be considered untrue. Logically, there can only be one assumption among competing enemy COAs, all others must be something less than an assumption. Perhaps the words assumption and prediction fail us in their definition on what intelligence analysts are trying to accomplish for the commander

### **Recommendation III: Re-implementing the Term Hypothesis**

Used to define possible future enemy actions before 1976, the term hypothesis fits appropriately in all the places where other terms seem to fail in breadth of meaning. This is not a modern term or an original idea, but used by the renowned war theoretician, Baron de Jomini. He used it as one of the four means of obtaining information on enemy operations. This process of forming and testing hypothesis served Jomini so well during his career that he “was never more than two or three times mistaken.”<sup>128</sup> Nowhere in current doctrine is the word hypothesis used, especially within an analytical or intelligence context. . Perhaps it is time to reconsider using this term in intelligence doctrine to curb against the expectancy tendencies of less exact terms such as assumption, presumption, and estimation.

Defined, a hypothesis is a “theory needing investigation: a tentative explanation for a phenomenon, used as a basis for further investigation.”<sup>129</sup> The CIA and other intelligence

---

<sup>128</sup> Jomini, 246-247.

<sup>129</sup> *Encarta World English Dictionary* (1999), s.v. “hypothesis.”

agencies commonly use the word hypothesis when trying to determine alternate futures during strategic analysis. Richard Heuer, a leading CIA analyst and researcher, points out in his work, “A systematic analytical process requires selection among alternative hypothesis, and it is here that analytical practice often diverges significantly from the ideal and from the canons of scientific method.”<sup>130</sup> A hypothesis is not a prediction (an opinion), or assumption (taking something for granted) nor a guess (an opinion lacking evidence); these terms are too limiting by their definitions. A hypothesis is a universal scientific principle used to help explain possible future enemy events based on analysis.

When we come to accept a hypothesis, we are not saying it is an inescapable or accurate conclusion from the evidence, but that it is the most acceptable conclusion. We can never exhaustively verify a hypothesis. A hypothesis, like a generalization, always has a provisional character: it is acceptable until further notice <sup>131</sup>

If this statement is true, then analysts should not waste their time attempting to prove their hypotheses, only to disprove them. Refuting hypotheses or accepting it contingently based on its irrefutability, is foundational to the scientific method. Regardless, one can replace any word currently used in doctrine regarding future enemy actions and replace it with the word hypothesis without conflict, confusion, or misinterpretation. Forming hypotheses about the enemy still lets commanders plan against and anticipate enemy courses of actions. A hypothesis by definition is not an end unto itself; it is an explanation under investigation. Predictions and assumption are definitive words that do not necessarily require updating or testing. There is no ambiguity with hypothesis. Most analysts and leaders understand that a hypothesis is plausible based on analysis and research. The word prediction or assumption does not carry these connotations. Some may claim that the current methods found in doctrine are essentially the forming of hypotheses. If this is true, then the doctrine writers should state as much and just call

---

<sup>130</sup> Heuer, Jr., chap.4.

<sup>131</sup> Monroe C. Beardsley, *Practical Logic* ( New York: Prentice-Hall, 1950), 225-226.

them what they are: hypotheses. Regardless, the Army needs to consider the word hypothesis as the foundational word for step four of the IPB process, “determine threat COAs.”<sup>132</sup>

## Conclusion

The IPB Process, as presented in doctrine is in part, deficient. It provides an optimum framework, as designed, for determining certain and limited futures. However, it is a poor framework for uncertain environments where a range of futures or true ambiguity is experienced. Step four of the IPB process directs intelligence analysts to determine enemy COA as well as choosing the most likely and most dangerous courses of action. It is just not possible to determine enemy intentions in a range of futures or a truly ambiguous environment. The recommendations made in this monograph are designed to broaden the scope and depth of the intelligence estimate process to manage the hazardous paths of uncertainty faced by the Army today. Matching different operational environments to different tools of analysis for the best possible hypotheses regarding the enemy allow commanders to recognize opportunity and minimize threats.

LTG Wallace’s statement on the *Fedayeen* was disturbing to most Army leaders because it implied that the commander or his G2 did not consider actions taken by the *Fedayeen* beforehand. Would the same be true if the assessment of the *Fedayeen*’s possible lines of action was based on actual capability, instead of a prediction based on the organization intentions? It is impossible to tell in retrospect. However, the commander of 2<sup>nd</sup> Brigade, 101<sup>st</sup> Division, after clearing *Fedayeen* fighters from Kifl, Hillah, Najaf, and Karbala, was asked whether the paramilitaries would re-emerge after his unit moved on. He replied, “A lot of them are still there. But their weapon systems have been destroyed or removed; their communications have been destroyed or removed; their barracks—their headquarters—have been destroyed. You have to

---

<sup>132</sup> U.S. Army, FM 34-130, 08 July 1994, 2-44.

wonder how credible a force [they] really can be now.”<sup>133</sup> Perhaps the Army intelligence community should reconsider COL Koch’s declaration, “For intelligence purposes, only one thing counts: capabilities.”<sup>134</sup>

---

<sup>133</sup> “Conflict with Iraq: A Commander’s Viewpoint,” *U.S. News & World Report*, 09 (April 2003) n.p., on-line, Internet, 30 January 2004, available from <http://www.usnews.com/usnews/news/iraq/articles/anderson030409.htm>

<sup>134</sup> Koch, 43.

## BIBLIOGRAPHY

- Abizaid, John, deputy commander of CENTCOM. To Senate. *Nomination of LTG Abizaid to be Appointed to the Rank of General and Commander of USCENTCOM*. 25 June 2003. n.p. On-line, Internet, 26 January 2004, available from <http://www.centcom.mil/centcomnews/transcripts/20030605.html>.
- Allison, Graham T. *Essence of Decision*. Boston: Little and Brown, 1971.
- Beardsley, Monroe C. *Practical Logic*, New York: Prentice-Hall, 1950.
- Berkowitz, Bruce & Allan Goodman. *Best Truth*. New Haven, CT: Yale University Press, 2000.
- Brei, William S. *Getting Intelligence Right: The Power of Logical Procedure*. Occasional Paper No. 2 Washington D.C: Joint Military Intelligence College, January 1996.
- Bowden, Mark. *Blackhawk Down*. New York: Atlantic Monthly Press, 1999.
- CALL Newsletter, "Operation Outreach." No. 03-27. Fort Leavenworth, KS: Center for Army Lessons Learned, October 2003.
- Clausewitz, Carl von. *On War*. Edited and translated by Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press, 1976.
- Cohen, Eliot A. and John Gooch. *Military Misfortunes*. New York: Vintage Books, 1990.
- "Conflict with Iraq: A Commander's Viewpoint." *U.S. News & World Report*, 09 (April 2003) n.p., On-line. Internet, 30 January 2004. Available from <http://www.usnews.com/usnews/news/iraq/articles/anderson030409.htm>
- Cordesman, Anthony H., "The Lessons of the Iraq War: Executive Summary." Eleventh Working Draft. Washington D.C: Center for Strategic and International Studies, 21 July 2003.
- \_\_\_\_\_. "Intelligence Failures in the Iraq War.", Washington D.C: Center for Strategic and International Studies, 16 July 2003)
- Courtney, Hugh, Jane Kirkland and Patrick Viguerie. "Strategy Under Certainty." *Harvard Business Review* (November/December 1997): 66-79.
- Davis, Forrest L. "Predictive Intelligence: Do We Really Need It?" *Military Intelligence*. Vol. 23, No. 2 (April-June 1997): 30-32.
- D'Este, Carlo. *Eisenhower: A Soldier Life*. New York,: Henry Holt and Company, 1992.
- Dewar, James A. et al. *Assumption-Based Planning: A Planning Tool for Very Uncertain Times*. Santa Monica, CA: RAND, 1993.
- Dorner, Dietrich. *The Logic of FAILURE*. New York: Metropolitan Books, 1996.
- Doubler, Michael D. *Closing with the Enemy*. Lawrence, Kansas: University Press of Kansas, 1994.
- Eddy, Manton S., "Enemy Relative Capabilities." Unpublished survey of selected general and intelligence officers, Fort Leavenworth, KS: Commandant, U.S. Army Command and General Staff College, 28 July 1948. Combined Arms Research Library, Fort Leavenworth, KS No. R-16829.3.
- Encarta World English Dictionary* CD-ROM. Microsoft, 1999.

- Gazit, Shlomo, "Intelligence Estimates and the Decision-maker," In *Leaders and Intelligence*, edited by Michael I. Handel. London: Cass and Company, 1989
- Handel, Michael I. *War, Strategy, and Intelligence*. London: Frank Cass and Company, 1989.
- Herbert, Paul. "Deciding What Has to Be Done: General William E. DePuy and the 1976 Edition of FM 100-5, Operations," *Leavenworth Papers, Number 16*. Fort Leavenworth, KS: Combat Studies Institute, 1988.
- Heuer, Richard J. Jr. *Psychology of Intelligence Analysis*. CIA's Center for the Study of Intelligence, 1999. On-line. Internet, 26 January 2004. Available from <http://www.cia.gov/csi/books/19104/index.html>.
- Jomini, Baron de., *The Art of War*, Translated by. G.H. Mendell and W.P. Craighill. Reprint, Westport, CT: Greenwood Press Publishers, n.d.
- Kam, Ephraim. *Surprise Attack*. Cambridge, MA: Harvard University Press, 1988.
- Katter, R.V, C. A. Montgomery and J.R. Thompson. "Human Processes in Intelligence Analysis: Phase I Overview." Research Report 1237. Woodland Hills, CA: Operating Systems Inc., December 1979.
- Kent Sherman. *Sherman Kent and the Board of National Estimates: Collected Essays*. Washington D.C: CIA, Center for the Study of Intelligence, 1999. n.p., on-line, Internet, 24 February 2004, available from <http://www.cia.gov/csi/books/shermankent/toc.html>.
- Kerr, Bob "New commander discusses lessons learned in Iraq." *Army News Service*, 02 September 2003, n.p. On-line. Internet, 12 October 2003. Available from [http://www4.army.mil/ocpa/read.php?story\\_id\\_key=5194](http://www4.army.mil/ocpa/read.php?story_id_key=5194).
- Koch, Oscar W. *G2: Intelligence for Patton*. Philadelphia, PA: Whitmore Publishing Company, 1971.
- OEF-3<sup>rd</sup> Bde, 101<sup>st</sup> (AASLT) Anaconda AAR," *U.S. Army Knowledge Collaboration Center*. n.d. n.p. 82. On-line, Army Knowledge On-Line, 04 January 2004. Available from Knowledge Collaboration Center/ Army KCC Home/ Army Communities/ Intelligence/ Intel Reference Files/ After Action Reviews/Operation Enduring Freedom/ OEF - 3rd Bde, 101st (AASLT) Anaconda AAR.ppt. Document is unclassified.
- Peters, Ralph. "Military Intelligence: The Broken Branch." *Army Times*. 13 April 1998: 35.
- Posen, Barry R. *The Sources of Military Doctrine*. Ithaca, NY: Cornell University Press, 1984.
- Quirk, Richard J. III "Intelligence for the Division: A G2 Perspective." An Individual Study Project. Carlisle Barracks, PA: U.S. Army War College, 1992.
- \_\_\_\_\_. "Seeking a Theory of Tactical Intelligence to Support the Airland Battle." Monograph, U.S. Army Command and General Staff College, Fort Leavenworth, KS:, 1985.
- \_\_\_\_\_. "The Artist's Approach to Military Decision-Making at the Operational Level." Monograph, U.S. Army Command and General Staff College, Fort Leavenworth, KS: 1986.
- Schmitt, John F. "A Practical Guide for Developing and Writing Military Concepts." Defense Adaptive Red Team. Hicks and Associates, Inc. n.d.
- Schwein, Edwin E, *Combat Intelligence: It Acquisition and Transmission*. Washington D.C: The Infantry Journal, 1936.

- Shinseki, Gen Eric K., chief of staff, U.S. Army. Address. 122<sup>nd</sup> National Guard Association of the United States General Conference, Atlantic City, N.J., 14 September 2000.
- Starry, Donn A. "A Tactical Evolution—FM 100-5." *Military Review*. (August 1978): 3-4.
- Townsend, Elias Carter, *Risks: The Key to Combat Intelligence*. Harrisburg, PA: The Military Service Publishing, 1955.
- Sheehan, Kevin P., "Preparing for an Imaginary War? Examining Peacetime Functions and Changes of Army Doctrine." Ph.D. diss., Harvard University, 1988.
- Senge, Peter M. *The Fifth Discipline*. New York: Currency Doubleday, 1990.
- U.S. Department of the Army. *Operations*, FM 3-0. Washington D.C: June 2001.
- \_\_\_\_\_. *Mission Command: Command and Control of Army Forces*. FM 6-0. Washington, D.C: 11 August 2003.
- \_\_\_\_\_. *Combat Intelligence*, FM 30-5 Washington D.C:1940.
- \_\_\_\_\_. *Combat Intelligence* FM 30-5 Washington D.C:1951.
- \_\_\_\_\_. *Combat Intelligence*. FM 30-5. Washington D.C:1973.
- \_\_\_\_\_. *Intelligence and Electronic Warfare Operations*. FM 34-1. Washington, D.C: 27 September 1994.
- \_\_\_\_\_. *Intelligence Analysis*. FM 34-3. Washington, D.C: 15 March 1990.
- \_\_\_\_\_. *Intelligence Preparation of the Battlefield*. FM 34-130. Washington D.C: May 1989.
- \_\_\_\_\_. *Intelligence Preparation of the Battlefield*. FM 34-130. Washington D.C: 08 July 1994.
- \_\_\_\_\_. *Operations*. FM 100-5. Washington, D.C: 01 July 1976.
- \_\_\_\_\_. *Staff Officers' Field Manual, The Staff and Combat Orders*. FM 101-5. Washington D.C:1940.
- \_\_\_\_\_. *Staff Organization and Operations*. FM 101-5. Washington D.C: May 1997.
- \_\_\_\_\_. Assistant Chief of Staff, G-2, *Status of the Army Intelligence System*. Washington D.C:13 January 1954. Combined Arms Research Library, Fort Leavenworth, KS No. N-17139.
- U.S. Army Intelligence Center & Fort Huachuca. *Intelligence Preparation of the Battlefield*. FM 2-01.3 (Initial Writer's Draft). Fort Huachuca, AZ: 21 February 2003.
- \_\_\_\_\_. *U.S. Army Intelligence History: A Sourcebook*. Edited by James P. Finley. Fort Huachuca, AZ: 1995.
- U.S. Army Training and Doctrine Command. *Objective Force Maneuver Units of Action*. TRADOC Pamphlet 525-3-90. Fort Monroe, VA: 01 November 2002.
- \_\_\_\_\_. Deputy Chief of Staff Intelligence, U.S. Army Training and Doctrine Command. "The Operational Environment and Threat," 06 June 2001, 30. Powerpoint. On-line. Army Knowledge On-Line, 04 January 4, 2004. Available from Knowledge Collaboration Center/ Army KCC Home/ Army Communities /Intelligence/ Intel Reference Files/ OPFOR & the COE/ COE Overview by DCSINT TRADOC – 06JUN01[01].ppt. Document is unclassified.

- U.S. Congress, House, Committee on Armed Services. *Intelligence Successes and Failures in Operations Desert Shield/Storm, Report of the Oversight and Investigations Subcommittee of the Committee on Armed Services*. Committee Print. 103<sup>rd</sup> Cong. 1<sup>st</sup> Sess. Washington D.C: GPO, 1993.
- U.S. Congress. Senate. Committees on Armed Services and Foreign Relations, *The Military Situation in the Far East*, 82<sup>nd</sup> Congress, 1<sup>st</sup> Session. Washington D.C: GPO, 1951, 759.
- U.S. Joint Chiefs of Staff. *Doctrine for Intelligence Support to Joint Operations*. Joint Pub 2-0. Washington D.C: 09 March 2000.
- \_\_\_\_\_. *Joint Tactics, Techniques, and Procedures for Intelligence Preparation of the Battlespace*. Joint Pub 2-01.3. Washington D.C: 24 May 2000.
- \_\_\_\_\_. *Doctrine for Joint Operations*, Joint Pub 3-0. Washington D.C: 10 September 2001.
- U.S. Naval War College. *Background to Decision Making*, 1<sup>st</sup> Edition. Newport, RI: June 1958.
- \_\_\_\_\_. *Sound Military Decision*. Newport, RI: 21 September 1942.
- Wass de Czege, Huba and Richard Hart Sinnreich. *Conceptual Foundations of a Transformed U.S. Army*. Land Warfare Paper Number 40. Arlington, VA: Association of the United States Army, 2002.
- Wohlstetter, Roberta. *Pearl Harbor, Warning and Decision*. Stanford, CA: Stanford University Press, 1962.