



Calhoun: The NPS Institutional Archive

Theses and Dissertations

Thesis Collection

2008-06

Military deception reconsidered

Martin, Charmine L.

Monterey, California. Naval Postgraduate School

<http://hdl.handle.net/10945/4136>



Calhoun is a project of the Dudley Knox Library at NPS, furthering the precepts and goals of open government and government transparency. All information contained herein has been approved for release by the NPS Public Affairs Officer.

Dudley Knox Library / Naval Postgraduate School
411 Dyer Road / 1 University Circle
Monterey, California USA 93943

<http://www.nps.edu/library>



**NAVAL
POSTGRADUATE
SCHOOL**

MONTEREY, CALIFORNIA

THESIS

MILITARY DECEPTION RECONSIDERED

by

Charmaine L. Martin

June 2008

Thesis Advisor:
Second Reader:

John Arquilla
Tara Leweling

Approved for public release; distribution is unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, 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, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.			
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE June 2008	3. REPORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE:) Military Deception Reconsidered			5. FUNDING NUMBERS
6. AUTHOR(S) Martin, Charmaine L.			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			10. SPONSORING/MONITORING AGENCY REPORT NUMBER
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.			
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited			12b. DISTRIBUTION CODE
13. ABSTRACT (maximum 200 words) This thesis explores the elements of military deception and defines the overarching principles that make for successful military deception. A good reference point is the six principles of military deception as defined by Joint Publication (JP) 3-58: focus, integration, timeliness, security, objective, and centralized control. However, I propose that operational advantage, consisting of surprise, information advantage and security, are essential elements of a successful military deception. To refine the scope of the research, this analysis of deception is focused on the tactical and operational levels of war. This thesis begins with a cross analysis of the principles of deception as defined by the U.S. military and academics, followed by historical case studies, then an application and validity test of my proposed key elements of deception against the case studies.			
14. SUBJECT TERMS Deception, Operational Level Deception, Tactical Level Deception, Information Advantage, Surprise, Operational Advantage, Military Tactics, Deception Campaigns			15. NUMBER OF PAGES 69
			16. PRICE CODE
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution is unlimited

MILITARY DECEPTION RECONSIDERED

Charmaine L. Martin
Major, United States Air Force
B.A., University of West Florida, 1991
M.A., University of West Florida, 1993

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN INFORMATION OPERATIONS

from the

**NAVAL POSTGRADUATE SCHOOL
June 2008**

Author: Charmaine L. Martin

Approved by: John Arquilla
Thesis Advisor

Tara A. Leweling
Second Reader

Gordon McCormick
Chairman, Department of Defense Analysis

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

This thesis explores the elements of military deception and defines the overarching principles that make for successful military deception. A good reference point is the six principles of military deception as defined by Joint Publication (JP) 3-58: focus, integration, timeliness, security, objective, and centralized control. However, I propose that operational advantage, consisting of surprise, information advantage and security are essential elements of a successful military deception. To refine the scope of the research this analysis of deception is focused on the tactical and operational levels of war. This thesis begins with a cross analysis of the principles of deception as defined by the U.S. military and academics, followed by historical case studies, then an application and validity test of my proposed key elements of deception against the case studies.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
A.	THESIS OVERVIEW –PROBLEM DEFINITION	1
B.	WHAT IS DECEPTION?	2
C.	DECEPTION IN MILITARY STRATEGY	3
D.	RELEVANCE	6
E.	METHODOLOGY	6
II.	PRINCIPLES OF DECEPTION.....	7
A.	U.S. MILITARY STANDPOINT: JOINT PUBS 3-58 AND 3-13	7
B.	ACADEMIC THEORISTS’ PERSPECTIVES	9
	1. Donald Daniel and Katherine Herbig	9
	2. Jon Latimer	13
	3. Michael I. Handel.....	13
	4. Charles Fowler and Robert Nesbit.....	14
	5. Barton Whaley	15
	6. Walter Jajko.....	16
	7. Jock Haswell.....	17
	8. James Dunnigan and Albert Nofi.....	17
C.	CROSS ANALYSIS OF MILITARY AND THEORETICAL STANCES	18
D.	CRITICAL FACTORS FOR SUCCESSFUL DECEPTION: OPERATIONAL ADVANTAGE, INFORMATION ADVANTAGE, AND SURPRISE	19
III.	CASE STUDIES.....	21
A.	MONGOLS INVADE EUROPE, 1241	21
B.	U.S. REVOLUTIONARY WAR, 1776-1781	25
C.	U.S. CIVIL WAR	27
D.	HEZBOLLAH.....	29
IV.	CONCLUSIONS	35
	APPENDIX – JOPES IO (MILITARY DECEPTION) GUIDANCE.....	39
	LIST OF REFERENCES.....	43
	BIBLIOGRAPHY	47
	INITIAL DISTRIBUTION LIST	53

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF FIGURES

Figure 1.	Six Principles of Military Deception	2
Figure 2.	Military Strategists' Views of Deception on the Continuum of War	5
Figure 3.	Daniel and Herbig's Simple Formula for Successful Deceptions	9
Figure 4.	Relationship between analysis time and deception fidelity (from Fowler and Nesbit).....	15

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

Table 1. M-type vs. A-type Deceptions (adapted from Daniel and Herbig).....12
Table 2. Comparison of Academics to Military Principles of Deception.....19

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGEMENTS

Great thanks and appreciation Dr. Arquilla, Dr. Tara Leweling, and the staff of the Department of Defense Analysis (especially Sherry Pennell) for their patience and assistance writing this paper after my early departure from school.

Huge thanks to my parents, sister, Suzy Streeter, Mack Bessemer, Tim Ryan, the RAF Lakenheath crew and friends who kept pushing me to finish and not give up.

THIS PAGE INTENTIONALLY LEFT BLANK

I. INTRODUCTION

There is a sucker born every day.¹

P.T. Barnum

A. THESIS OVERVIEW –PROBLEM DEFINITION

This thesis explores the elements of military deception and defines the overarching principles that make for successful military deception. A good reference point is the six principles of military deception as defined by Joint Publication (JP) 3-58: focus, integration, timeliness, security, objective, and centralized control.² However, I propose that operational advantage, consisting of surprise, information advantage and security are essential elements of a successful military deception. For the purposes of this thesis, operational advantage is defined as a military lead over the enemy (higher ground, greater freedom of movement, more troops, better equipment), information advantage is enhanced situational awareness (better intelligence, understanding of the battlefield/opposing force), and efficiency is defined as a faster and more succinct decision making time line. To refine the scope of the research, this analysis of deception is focused on the tactical and operational levels of war. Figure 1 is a conceptual diagram of JP 3-58's six overlapping principles of military deception.

¹ {World of Quotes.com}, Retrieved on 29 May 2006, <http://www.worldofquotes.com/author>.

² Joint Publication 3-58: Joint Doctrine for Military Deception. (Washington DC: Government Printing Office), I2 – I3.

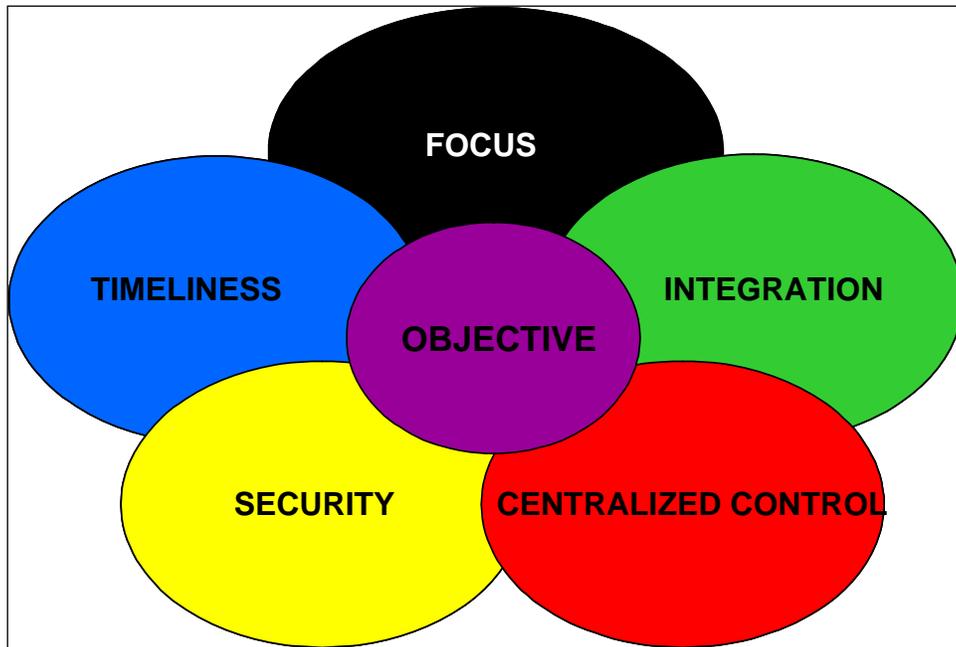


Figure 1. Six Principles of Military Deception

The commander’s objective, i.e., what the commander intends to accomplish, is the centralizing idea of any military deception and are hence represented centrally in the figure.

B. WHAT IS DECEPTION?

There are many different definitions of deception, with supporting principles that will be further explored in Chapter II, The Principles of Deception. In plain terms, deception consists of actions taken to manipulate the adversary’s information network in order to induce the adversary to react in a specific manner. These actions can include manipulation of the adversary’s intelligence apparatus. Deception is executed so that the commander’s mission is accomplished or goal is achieved.

The basic U.S. Military definition of deception, as stated in Joint Publication 3-58, Joint Doctrine for Military Deception, is “...those actions executed to deliberately mislead adversary military decision makers as to friendly military capabilities, intentions, and operations...”³ Per the JP 3-58 definition, deception can be applied to all levels of

³ Joint Publication 3-58: Joint Doctrine for Military Deception. (Washington DC: Government Printing Office), II.

war and is a subset of Command and Control Warfare (C2W). However, deception is more commonly described as a subcomponent of Information Operations (IO).⁴

JP 3-13, Joint Doctrine for Information Operations, further characterizes deception as an offensive information operations capability—i.e., “...the integrated use of assigned and supporting capabilities and activities, mutually supported by intelligence, to affect adversary decision makers and achieve or promote specific objectives”.⁵ JP 3-13, IO, was updated in February 2006 to reflect changes and updates in information operations. The revised joint publication, explicitly articulates the role of deception in military planning with a detailed appendix/checklist. Given the greater level of detail, this update implies that information operations are being considered a more important part of military planning, and by extension; deception should be receiving greater emphasis. So, now that the U.S. military intends to do more about information operations, how does deception better fit into the overall framework of military strategy?

C. DECEPTION IN MILITARY STRATEGY

Deception has been an important component of war through the ages. In recent times, however, deception has often been undervalued, as evidenced by the removal of Field Manual (FM) 90-2, Military Deception, from the listing of official U.S. Army publications and the publication date (and last review) of the Joint Publication (JP) 3-58, Joint Doctrine on Military Deception, of May 1996. Confusing and fooling the enemy has allowed many an under-manned and out-gunned commander to win a decisive victory or an asymmetric force to win at lower cost and risk. Indeed, Barton Whaley contends that nearly all deceptions have been successful and there have been no failures.⁶ Dr. Whaley’s comment is based on his analysis of 167 battles, in which deception played a major role between 1914 and 1973.⁷ The Chinese strategist, Sun Tzu, similarly stated, “All warfare is based on deception.”⁸

⁴ Joint Publication 3-58: Joint Doctrine for Military Deception. (Washington DC: Government Printing Office), vi.

⁵ Joint Publication 3-13: Joint Doctrine for Information Operations (Washington DC: Government Printing Office), viii.

⁶ Barton Whaley, quote from Dr. Hy Rothstein.

⁷ Jon Van Fleet. *Tactical Military Deception*. (NPS’ Master’s Thesis, 1985), 25.

⁸ Samuel Griffith (translator). *Sun Tzu: The Art of War* (London: Oxford University Press, 1963), 66.

JP 3-13 outlines the methodology for executing military deception, highlights the salient considerations when undertaking deception, and lays the foundation for the relevance of deception to military planning and strategy. The following paragraph clearly shows deception as an integral part of planning a military operation:

The target is the adversary decision maker, who is studied through Intelligence collection, analysis, and dissemination systems (his communication channels). In essence, know thy enemy and his decision making process. The goal is to have the adversary respond in a desired manner; hence the deception is focused on a particular objective. Deception is always woven into the basic operational plan to allow overlap and to effect timeliness. Finally, intelligence is essential to a successful deception operation. Intel needs to identify the targets, assists in creating a story credible, and assessing the effectiveness of the operational. None of which can be accomplished without proper Operations Security (OPSEC), the need to know and keeping the plan out of the enemy control.⁹

Why, then, had deception seemingly fallen to the wayside in military planning? The answer is unclear, but D. Glantz, author of *Soviet Military Deception in the Second World War* suggests, “In the West...deception is seen as immoral, and more than one authority has claimed that, as a result, Americans resort to deception only reluctantly or else do it poorly”.¹⁰ Maybe the U.S. public is averse to lying, cheating, and deceiving to win a war. Or perhaps it could be the misperception that strong nations don’t need to use deception to win and only weak nations use deception for lack of military might and sound strategy.

In military strategy, deception has been both praised and disparaged by the leading theorists. Carl von Clausewitz advised against the use of deception:

The bitter earnestness of necessity usually forces us into direct action, so that there is no room for that game. In a word, the pieces on the strategical chessboard are lacking in that agility which is the element of stratagem and cunning.¹¹

⁹ Joint Publication 3-13: Joint Doctrine for Information Operations (Washington DC: Government Printing Office), II-4 – II-5.

¹⁰ D. Glantz. *Soviet Military Deception in the Second World War* (London: Frank Cass, 1989) quoted in Jon Latimer. *Deception in War* (The Overlook Press: Woodstock, NY, 2001), 3.

¹¹ C. Carr (ed), *The Book of War* (NY: Random House, 2000), 425.

On the pro-deception position, Niccolo Machiavelli, author of *The Prince*, an exemplary treatise on statesmanship and power, states the ruler (or military leader) should acquire and maintain a good reputation while accomplishing the necessary evils to accomplish the goals--in other words, be deceptive to reach a desired end state. ¹² Sir Basil Henry Liddell Hart, the esteemed British military strategist, suggested:

Luck can never be divorced from war, as war is part of life. Hence the unexpected cannot guarantee success. But it guarantees the best chance of it. That is why the successes of history, if not won by exceptionally clever generalship, have been won by generalship that was astoundingly bold—or were due to the opponent being blindly foolish. ¹³

Three renowned military strategists with strikingly opposing views on the use of deception use in warfare, yet all remain master strategists. Sun Tzu believes winning a battle without ever entering the field of battle, via means of deception, is the ultimate goal of war. Sir Liddell Hart proposes indirect action or being bold and surprising the enemy during the ensuing battle. Finally, von Clausewitz implies that only the weak in military force and military cunning will ever resort to deception. Figure 2 depicts the three strategists on the continuum of war timeline.

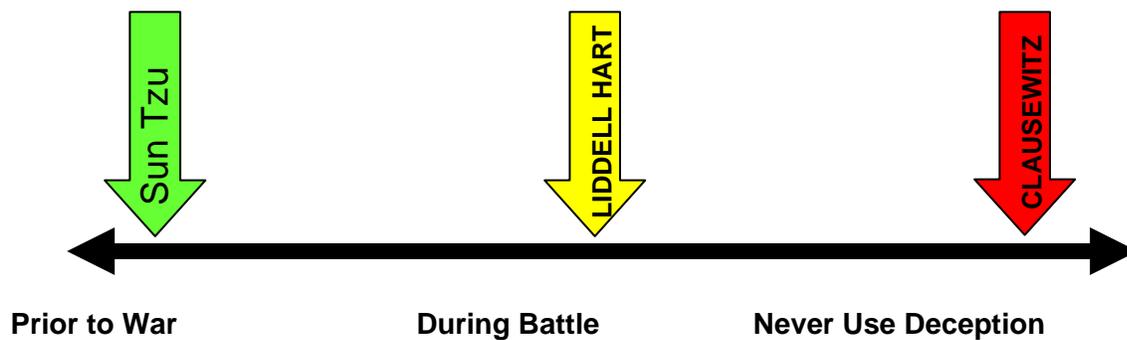


Figure 2. Military Strategists' Views of Deception on the Continuum of War

¹² Niccolo Machiavelli, *The Prince* (NY: New American Library, 1952), 110- 113.

¹³ B. H. Liddell Hart, *Thoughts on War* (Ann Arbor: University Microfilm International, 1944), 204.

D. RELEVANCE

The renewed emphasis on information operations, as evidenced by the JP 3-13 update, suggests that a shrinking military force will be held responsible for expanding operational areas. Further, more agile and capable enemies enhance deception's utility for U.S. fighting forces. Commanders in the field are pressed for time during operations and require a basic understanding of deception's best practices. Analyzing the mechanisms of deception and synthesizing these into essential tenets could enhance deceptions usefulness as a force multiplier and achieve higher economy of force. To achieve U.S. objectives in Iraq and elsewhere, smaller U.S. forces are going to have to outwit, not just out gun, the enemy.

E. METHODOLOGY

The first chapter outlines the U.S. military and historical strategists' views on deception. The second chapter centers upon the broader scholarly literature on deception, highlighting seven to eight experts in the field. A short summary of each scholar's general principles and what they believe is the root of a successful deception is discussed. To clearly delineate between scholarly thought and the U.S. Joint Publications' six principles of deception (focus, objective, centralized control, security, timeliness, and integration) a summation and comparison of the opposing schools of thought will be presented. These schools of thought are then compared against current US military doctrine regarding deception.

Chapter III is a presentation of four historical case studies of tactical and operational deception in battle. Each case study is a brief description of a particular battle, how deception was applied, and how and why it was successful. Chapter III is also an analysis of each of the four case studies to see if any, or all, show evidence of my hypothesis that operational advantage is essential to successful deception. Again, operational advantage consists of surprise, information advantage, security, and economy of force.

II. PRINCIPLES OF DECEPTION

Ruses are of great usefulness. They are detours which often lead more surely to the objective than the wide road which goes straight ahead.

Frederick the Great: Instructions for His Generals.¹⁴

Who is better prepared to define deception, in particular military deception: the United States military or academics? Do the academics' theories and principles correlate with the six principles the U.S. military applies to deception? Academics, such as Barton Whaley, Katherine Herbig and Donald Daniel, Michael Handel, and others have written volumes on deception, each with competing principles and rules for a successful deception operation.

A summation and comparison of U.S. Military Doctrine, Joint Publication 3-58 (Joint Doctrine on Military Deception) and Joint Publication 3-13 (Joint Doctrine on Information Operations), opposed to select academics' principles is the quickest way to cull the relevant points. In theory, the critical factors absent from the literature are Operations Security (OPSEC), Surprise, Information Advantage (intelligence, communications channels, and feedback) and economy of force.

A. U.S. MILITARY STANDPOINT: JOINT PUBS 3-58 AND 3-13

JP 3-58 defines military deception as:

...those actions executed to deliberately mislead adversary military decision makers as to friendly military capabilities, intentions, and operations, thereby causing the adversary to take specific actions (or inactions) that will contribute to the accomplishment of the friendly mission.¹⁵

¹⁴ Robert Heintz Jr., *Dictionary of Military and Naval Quotations* (Annapolis, MD: U.S. Naval Institute, 1966), 283.

¹⁵ Joint Publication 3-58: Joint Doctrine for Military Deception. (Washington DC: Government Printing Office), II.

Joint Pub 3-58 outlines six principles for the conduct of deceptive military operations: focus, objective, centralized control, security, timeliness, and integration.¹⁶ These include: 1) *Focus* refers to the target of the deception operation--the target is the adversary decision maker who decides the adversary's courses of action, it is not the intelligence system which is a conduit or channel for information flow; 2) *Objective* is your intention, which is to cause the enemy to take (or not to take) a specific action; 3) *Centralized Control* defines the organization of the operation, directed and controlled by a single element with decentralized execution; 4) *Security* refers to the operational security, only the people who need to know are told about the operation and the ability to protect the plan(s) from the enemy; 5) *Timeliness* is allowing sufficient time for the adversary force to analyze the deceptive information, react as required and for the friendly feedback loop to notice the action; and 6) *Integration* means incorporating the deception plan into the basic operational plan, ensuring both occur simultaneously.¹⁷

Military deception is an integral subcomponent of Information Operations. Joint Pub 3-13, Joint Doctrine for Information Operations (IO), describes (IO) as “involv(ing) actions taken to affect adversary information and information systems while defending one’s own information and information systems.”¹⁸ Adversary information and information systems is a critical target to achieve information advantage in a deception campaign. The Joint Staff recently updated and republished Joint Pub 3-13 which further describes, “Offensive IO....the integrated use of assigned and supporting capabilities and activities, mutually supported by intelligence, to affect adversary decision makers and achieve or promote specific objectives.”¹⁹ The main focus of deception is the adversary decision maker so deception is but one component of the burgeoning field of Information Operations. Do the scholars agree with the military definition or do they proscribe to a different set of principles?

¹⁶ Joint Publication 3-58: Joint Doctrine for Military Deception. (Washington DC: Government Printing Office), I2 – I3.

¹⁷ Ibid.

¹⁸ Joint Publication 3-13: Joint Doctrine for Information Operations (Washington DC: Government Printing Office), vii.

¹⁹ Ibid., viii.

B. ACADEMIC THEORISTS' PERSPECTIVES

1. Donald Daniel and Katherine Herbig

Donald Daniel and Katherine Herbig's influential work, *Strategic Military Deception*, brought together leading authors on military deception. Daniel and Herbig's defined deception as:

...the deliberate misrepresentation of reality done to gain a competitive advantage...the immediate aim is to condition a target's beliefs; the intermediate aim is to influence the target's actions; and the ultimate aim is for the deceiver to benefit from the target's actions. Deceptions are often credited with success when only the first goal is achieved; but, to evaluate the actual impact deception has on the course of events, one should properly measure the success vis-à-vis the third goal.²⁰

Their focus was on strategic not operational or tactical deception, but they recognize their conclusions can apply to deceptions at all levels.²¹

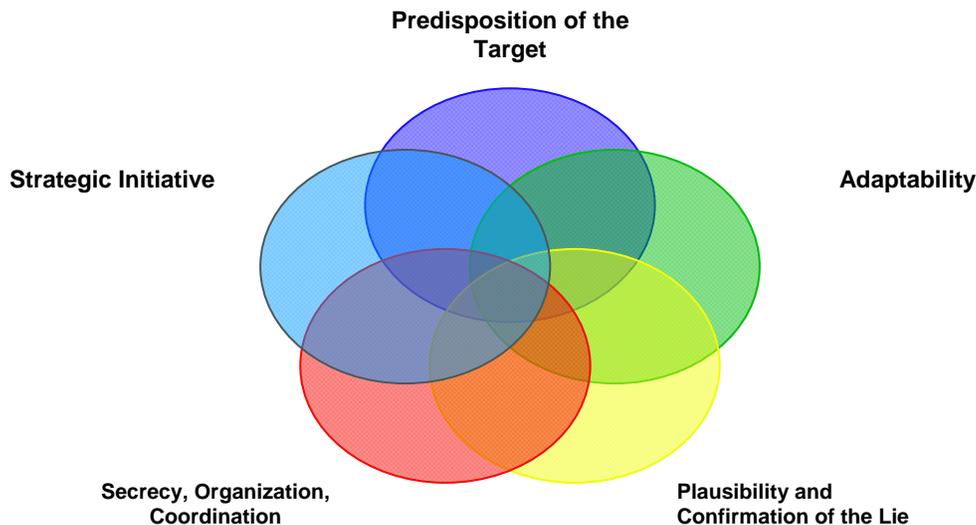


Figure 3. Daniel and Herbig's Simple Formula for Successful Deceptions

²⁰ Donald Daniel & Katherine Herbig. *Strategic Military Deception*. (New York: Pergamon, 1982), 3, 5.

²¹ *Ibid.*, 3.

They laid down a formula for success relying on “the basics” as written down by World War II British deception planners: 1) secrecy, organization, and coordination; 2) plausibility and confirmation; 3) adaptability; 4) predispositions of the target; and 5) factors in the strategic situation.²²

Secrecy refers to keeping the enemy in the dark; this could involve the use of a cover story, to hide the truth from the enemy. The other side of secrecy is applying “need to know” security to your own troops; “total security is elusive” so only the minimum numbers of personnel who need to know about the operation are allowed access.²³ To guarantee secrecy the deception must be well organized, referring to “detailed preparation”.²⁴ Encapsulating the secrecy and organization is the coordination directed from a centralized point.²⁵ But even the most secure organization can’t stop all the leaks, but even then the target must believe the deceptive information.

The deceiver must think like the enemy and not project his/her own assumptions and values onto the enemy. The plausibility of a deception is based on the ability of the deceiver to actually carry out what he is proposing. For example, Daniel and Herbig would advise that commander’s deception plans should not propose to invade Sicily in late June if the commander has no troops in the area and no means of getting them there in time. This would be an implausible deception. Adding to the plausibility is the confirmation of the plan by a number of credible sources.²⁶ The enemy must believe his sources are credible and a good way is to have as many open information channels to the enemy as possible. Either way the deception starts from the kernel of truth at the core.

The truth has a way of shaping as the situation changes and so must deception planners adapt to the changing environment. Deceptions are adaptive as the situation

²² Donald Daniel & Katherine Herbig. *Strategic Military Deception*. (New York: Pergamon, 1982), 16.

²³ Ibid, 16.

²⁴ Ibid.

²⁵ Ibid.

²⁶ Ibid, 18.

dictates and as new opportunities or feedback is received.²⁷ Adaptability is the ability to react to the enemy's reaction to the deception (hopefully they are reacting as planned).

How an enemy reacts is based on his predispositions, which are in turn based on his beliefs and values. In psychology, a "motivated bias" or rather the enemy reads into a situation what he wants to and chooses to see what he wants.²⁸ Even if it is readily apparent that something is wrong if all the supporting evidence and predispositions led to a false idea then he is deceived.

Finally, strategic initiative is given to the aggressor. Holding the initiative means the deception planners will have more time to properly plan and coordinate a deceptive operation while the defenders are left to respond as needed.²⁹ But having the initiative and knowing the enemy's predispositions are moot if the enemy doesn't receive the intended message.

Daniel and Herbig are perhaps the most articulate regarding the transmission of the message. In their model of the different possibilities during the transmission and interpretation of the signal they discuss five scenarios. The first is proper receipt and interpretation of the signal; second, the signal is garbled or modified in transmission; third, there is proper receipt, but the message is misinterpreted; fourth, there is proper receipt, but the message is dismissed as useless information; and fifth, the signal is never received by the target.³⁰ The deceiver always hopes for the first option: proper receipt and interpretation of the signal because it bodes well for a successful operation.

Daniel and Herbig demarcate two types of deception: ambiguity-increasing (A type) and misleading (M type).³¹ Ambiguity-increasing deception "confuses a target so that the target is unsure as to what to believe"; basically to compound his uncertainty by providing too many options.³² Plan Bodyguard, a World War II operation supporting the

²⁷ Donald Daniel & Katherine Herbig. *Strategic Military Deception*. (New York: Pergamon, 1982), 20.

²⁸ Ibid, 23.

²⁹ Ibid, 24.

³⁰ Ibid, 10.

³¹ Ibid, 5.

³² Ibid.

Normandy invasion provided multiple invasion threats so Germany wouldn't know where to build up troop strength is an example of ambiguity increasing deception.

On the contrary, misleading deception seeks to reduce ambiguity by “building up the attractiveness of one wrong alternative”, in essence convince the target to give attention to one option to the detriment of all others.³³ An example is Operation Mincemeat, the World War II operation to divert all German attention to Sardinia away from the intended amphibious landing zone of Sicily. (See Table 1)

	Role of Ambiguity	Intended Effect	Masking	Objective	Level of conflict	When Used (Friendly Force)	Exemplar
Misleading (M-type)	Reduce ambiguity while building up attractiveness of one wrong alternative	Enemy concentrates his force on the wrong location so friendly force can move at desired location	Masking a single operation, i.e., location and timing	Focused on one decision or critical piece of knowledge	Operational to Tactical	Friendly force has decided on his best (and generally, most obvious) course of action and wants the enemy to direct his efforts in the wrong location	Operation Mincement (Sicily vs. Sardinia)
Ambiguity-increasing (A-type)	-Level of ambiguity always remains high (or is increased) to protect the secrecy of the operation - compounds uncertainty	Keeping enemy off balance in the bigger picture Completely throw enemy off of all plans, confuse him on friendly theater planning	Masking theater war plan	Focused on a series of decisions, misleading about friendly intent	Strategic to Operational	Friendly force has multiple options, may or may not have decided on his course of action, but wants to keep enemy from focusing on friendly main effort	Plan Bodyguard (Normandy, multiple amphib threats to Europe)

Table 1. M-type vs. A-type Deceptions (adapted from Daniel and Herbig)³⁴

³³ Donald Daniel & Katherine Herbig. *Strategic Military Deception*. (New York: Pergamon, 1982), 5.

³⁴ *Ibid.*, 5-6.

Many of the theorists use the same basic terminology so the subsequent theorist overviews are an outline of their major comments and examination of deception principles. Further, as the summaries here illustrate, many of the theorists' central ideas regarding the principles of deception overlap.

2. Jon Latimer

Jon Latimer, retired British Battalion Intelligence Officer and author of *Deception in Warfare*, states that deception is “created by manipulating perceptions”.³⁵ The target’s perceptions are altered to attain military goals. Latimer espouses British deception doctrine which has four main objectives:

- 1) Provide a commander with freedom of action to carry out his mission, by deluding the enemy as to his intentions and by diverting the enemy’s attention away from the action being taken, in order to achieve the aim; 2) Mislead the enemy and persuade him to adopt a course of action that is to his disadvantage and can be exploited; 3) Gain surprise; and 4) Save the lives of one’s own troops.³⁶

To accomplish the four objectives above Latimer categorizes seven general principles for deception:

1. Focus – aimed at the mind of the decision maker (how he receives it, processes it, experiences, preconceptions)
2. Action – make them ACT in a particular manner, make him DO something
3. Coordination and central control: controlled by the operations staff (J3)
4. Preparation and Timing – logical planning process, timing is critical, marries up with operational plan,
5. Security – Operations Security (OPSEC), secure Operations Plan (OPLAN) and deception plan
6. Credibility and confirmation – enemy must believe it, need a cover plan
7. Flexibility – adapt to change, story-lines must change

3. Michael I. Handel

Michael I. Handel was a professor of Naval Strategy at the U.S. Naval War College and a prolific writer on military deception, surprise, and military intelligence.

³⁵ Jon Latimer. *Deception in Warfare* (Woodstock, NY: Overlook Press, 2001): 62.

³⁶ Ibid.

Handel calls deception, “a rational and necessary type of activity because it acts as a force multiplier; that is it magnifies the strength or power of the successful deceiver”.³⁷ He goes on to illustrate what deception does: 1) deceive enemy relative to friendly intentions; 2) deceive enemy relative to friendly capabilities; 3) inflating friendly capabilities; 4) deflating friendly capabilities; and 5) possible self-deception (confusing yourself in addition to the enemy).³⁸

Handel’s principles are centered on the intelligence process how a deception plan is molded before inception. His principles are to 1) determine enemy capabilities and intentions; 2) maintain secrecy of plan and ensure it is not compromised; 3) force an enemy violation of concentration of forces and space (make the enemy spread his force thinly); 4) friendly forces’ economy of force (less manpower to accomplish the mission); 5) use surprise; 6) think like the enemy.³⁹ Handel asserts three essentials items for an organization to accomplish a good deception: secrecy, delegation of authority, and patience.⁴⁰

4. Charles Fowler and Robert Nesbit

Charles Fowler and Robert Nesbit’s “Tactical Deception in Air-Land Warfare” in the *Journal of Electronic Defense* brilliantly defines their six “rules” for a successful tactical deception. Fowler and Nesbit emphasize intelligence sensors and the intelligence process over the broader principles of deception.

1. To be effective deception must be one that causes the enemy to believe what he expects, e.g., have a core of truth
2. Timely feedback is an essential element of all major deception operations
3. Deception must be integrated with operations
4. Denial of information on the true activities is also essential since it will depend, in significant part, on stealth and C3 countermeasures activities

³⁷ Michael I. Handel. “Intelligence and Deception.” In *Military Deception and Strategic Surprise*. (London: Frank Cass and Co., Ltd, 1982), 122.

³⁸ Ibid, 126,128-9, 132.

³⁹ Ibid, 124-146.

⁴⁰ Ibid, 137.

5. The realism required for any deception activity is a function of the sensor and analysis capabilities available to the opponent and the time available to analyze the situation disseminate the data to the appropriate points and take appropriate actions. (See Figure 4 for a graphical representation)
6. The most effective deception will be imaginative and creative, it cannot be “ordered” or “legislated” and must not become stereotyped or “bureaucratized”⁴¹

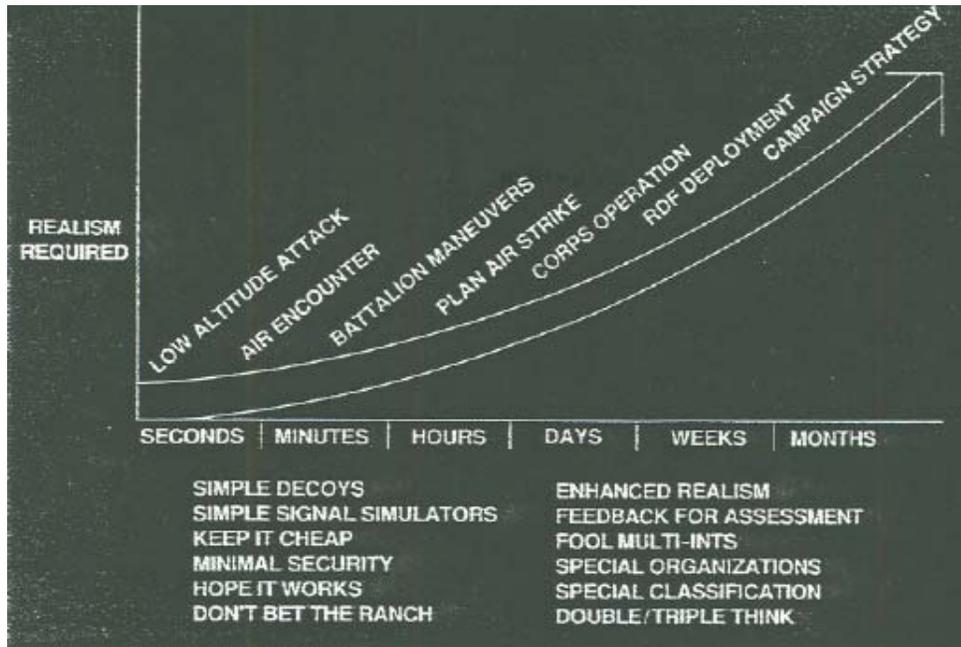


Figure 4. Relationship between analysis time and deception fidelity (from Fowler and Nesbit)⁴²

5. Barton Whaley

Barton Whaley is a pillar in the deception community who has written influential documents about deception in World War II and beyond. Whaley, like Latimer, pronounces deception as a “distortion of perceived reality”.⁴³ He goes on to declare the “purpose of deception is to profess the false in the face of the real”.⁴⁴ Dr. Whaley then

⁴¹ Charles Fowler and Robert Nesbit. “Tactical Deception in Air-Land Warfare,” *Journal of Electronic Defense* (June 1995), 42, 44, 76.

⁴² *Ibid.*, 39.

⁴³ Barton Whaley. “Toward a General Theory of Deception.” In *Military Deception and Strategic Surprise* (London: Frank Cass, 1982), 182.

⁴⁴ *Ibid.*

breaks deception into two halves: dissimulation (hiding the real) and simulation (showing the false).⁴⁵ Whaley's process of deception is a ten step process composed of:

1. Know the strategic goal
2. What reaction do you want from the target
3. What do you want the enemy to perceive
4. What facts are hidden (truth) and what ideas are publicized (falsehood)
5. Analyze pattern of concept to be obscured
6. Analyze pattern of concept to be publicized
7. Designate available means to perpetrate the deception
8. Intelligence staff passes plan over to operations staff
9. Transmit signal to target channels
10. Target must accept the deception⁴⁶

6. Walter Jajko

In his article, "Deception: Appeal for Acceptance; Discourse on Doctrine, Preface to Planning" Walter Jajko declares, "deception targets the adversarial decision maker".⁴⁷ "The broadest objectives for deception activities are: on one's side, the masking of vulnerabilities, exaggeration of strengths, or protection of capabilities and intentions; and on the adversary's side, the misdirection of effort, increase in uncertainty or confirmation of certainty."⁴⁸ Deception operations "can be force multipliers, mission enhancers, and strategic enablers".⁴⁹ Jajko views deception as an iterative process with sequential steps for planning, evaluating (is the plan secure), coordinating, deconflicting, integrating, approving, executing, analyzing, adjusting, coordinating, executing, evaluating,

⁴⁵ Barton Whaley. "Toward a General Theory of Deception." In *Military Deception and Strategic Surprise* (London: Frank Cass, 1982), 183.

⁴⁶ *Ibid.*, 188-89.

⁴⁷ Walter Jajko. "Deception: Appeal for Acceptance; Discourse on Doctrine; Preface to Planning," *Comparative Strategy* 21 (2002), 351.

⁴⁸ *Ibid.*, 354.

⁴⁹ *Ibid.*, 353.

terminating, evaluating, recording, examining, and studying.⁵⁰ His focus is on a six step planning process in which deception planners have direct access to senior leadership:⁵¹

1. Set forth purposes and formulate objectives
2. Why use deception to achieve the objective
3. Assess the target (capabilities, strengths, etc)
4. Develop a deception strategy
5. Build detailed schedule for the plan
6. Exploit any/all opportunities
7. Plan for termination of the plan⁵²

7. Jock Haswell

Jock Haswell's Seven Principles for Deception, from *The Tangled Web: The Art of Tactical and Strategic Deception*, are so highly thought of that the Monash University of Australia has included them in a course on Information Conflict. Haswell, like Latimer, closely follows the military principles of deception.

- a. Preparation – well defined aim and specific target
- b. Credibility – fits what the target expects; seems logical to the target
- c. Multi-Channel Support—all info sent across different channels must agree
- d. Centralized Control – to avoid confusion; highest level determined by number of units involved
- e. Security – limited to fewest number of people; need to know basis
- f. Flexibility – take advantage of opportunities or discard as needed
- g. Coordination – only provided information as needed⁵³

8. James Dunnigan and Albert Nofi

Getting the message to the enemy is important, but what are the means to deliver the message? James Dunnigan and Albert Nofi put forward basic deceptive tactics used over the ages:

⁵⁰ Walter Jajko. "Deception: Appeal for Acceptance; Discourse on Doctrine; Preface to Planning," *Comparative Strategy* 21 (2002), 357.

⁵¹ *Ibid.*, 355.

⁵² *Ibid.*, 358-61.

⁵³ Carlo Kopp. "Classical Deception Techniques, Perception Management, Propaganda, Advertising." Retrieved on 2 May 2006 from Monash University, Australia: <http://www.csse.monash.edu.au/courseware/cse468/Lectures/CSE-468-08.pdf>, 8-9.

- Concealment – hiding forces using natural cover
- Camouflage – hiding forces using artificial means
- False and planted information – giving the enemy bad info
- Displays – make the enemy see what isn't there
- Demonstrations – feinting actions; implies action, but no follow-up
- Feints – implies action, with follow-up action
- Ruses—tricks⁵⁴

C. CROSS ANALYSIS OF MILITARY AND THEORETICAL STANCES

An analysis of JP 3-58 and JP 3-13 principles of deception against academic theorists proves there is a correlation between the two camps with some major discrepancies. Table 2 provides a graphical analysis.

The academics often don't discuss the objective, i.e., the aim of the military operation or the desired end states. Generally, the academic literature refrains from identifying the focus of a deception. Some academics argue for targeting the adversary's leader or senior leadership. Daniel and Herbig, on the contrary argue for targeting, the adversary's intelligence organization. Others refrain from the subject.

The adversary's intelligence organization is often the entry point for information about friendly intent and capabilities. However, intelligence organizations often do not make the decisions for the army/state--the adversary maker and/or leader retain those decisions. Centralized control was mentioned by more than half the academics though it is more inferred than stated by Jajko and Daniel and Herbig. Everyone agrees that security is paramount for a successful deception. Timeliness is another hit and miss principle with the academics, some believe building timelines is important and others ignore the issue all together. Only Fowler and Nesbit and Latimer discuss integration into the operational plan.

⁵⁴ James Dunnigan and Albert Nofi. *Victory and Deceit: Dirty Tricks at War*. (New York: William Morrow and Company, Inc., 1995), 7 -8.

	Daniel & Herbig	Latimer	Handel	Fowler & Nesbit	Whaley	Jajko	Haswell
Focus	Intel org	X				X	X
Objective		X			X	X	X
Centralized Control	X	X				X	X
Security	X	X	X	X	X	X	X
Timeliness		X		X		X	
Integration		X		X			

Table 2. Comparison of Academics to Military Principles of Deception

D. CRITICAL FACTORS FOR SUCCESSFUL DECEPTION: OPERATIONAL ADVANTAGE, INFORMATION ADVANTAGE, AND SURPRISE

How can we synthesize these principles? What are the common strands found in each? Deception planners must ensure the deceptions contain an element of truth or they will not be realistic or plausible. The deception should be integrated into operations from the start so both enemy and friendly forces take it as a fact and not a ruse. Infiltrating the enemy network and convincing all friendly forces not in the know that the deception doesn't exist is part of the hurdle, thus making operational security a critical factor.

Keeping the “plan” and true desired effect out of the enemy’s grasp is the goal of deception. This is enhanced by intelligence—knowing your enemy, knowing his channels of information receipt, and understanding the enemy’s predispositions. Furthermore, ensuring the scenario is plausible, to not only the planners, but to the enemy’s way of thinking, can guarantee success. Finally, instituting valid feedback channels to gauge the enemy response to deception and flexibility in response to the

enemy's rejoinder are also essential. But what is missing from the theorist's main principles? As the Air University Cyberspace and Information Operations Study Center webpage states, "OPSEC alone won't adversely influence enemy capability to perceive friendly mission intent or dispositions. He will either commit more assets to gather information or will become more dangerously unpredictable."⁵⁵

Operational advantage, consisting of surprise, information advantage, security, and incorporation of feedback mechanisms into the planning phases, is missing from the above listing of "required" items for deception. Surprise is used to confuse the enemy, deceive them about the force size/components, time of attack, location of attack, and intent. Surprise is enhanced by proper information advantage, which in essence is good intelligence and more importantly proper use of the intelligence data, and keeping the info as need to know (security). Ultimately, this can lead to economy of force; applying minimal manpower to outwit rather than out gun the enemy. Reviewing some operational level deceptions will further the case for surprise, info advantage, and security leading to economy of force.

⁵⁵ Battlefield Deception Operations, <http://www.au.af.mil/info-ops/influence.htm#deception> accessed on 29 March 2008.

III. CASE STUDIES

The real target in war is the mind of the enemy commander, not the bodies of his troops

Captain Sir Basil Liddell Hart, *Thoughts on War*, 1944

Military operations from history provide the basis and supplementary justification for surprise, information advantage, and security as essential elements for operational advantage and in the long-term victory. To emphasize the point, the cases studies are across a broad range of history, from the Mongol invasion of Europe in 1241 to Hezbollah in Lebanon today.

A. MONGOLS INVADE EUROPE, 1241

The Mongolian invasion of Poland and Hungary in 1241 is an excellent model for deception. The Mongols, under Sabutai, expertly utilized surprise (attacking from a different location than expected), security (keeping the attack location and overall goal hidden) and information advantage (learning the ways and political issues of the enemy) allowing economy of force (using minimal numbers and defeating possibly overwhelming odds).

The Mongols invaded Europe at Liegnitz, in what is modern day Poland, in April 1241 with only 20,000 men. However, this was just the diversion while the main thrust moved into Hungary.⁵⁶ The Mongols, led by Kaidu (a great-grandson of Genghis Khan) had already run through two towns, Lublin and Sandomir, and it was known they were advancing further into Europe.⁵⁷ The bait and switch was Sabutai, General to Genghis Khan, leading the real army (70,000 men, mainly light cavalry with bows) onto the prime objective.⁵⁸ Sabutai marched toward Hungary and the Danube, from modern day Russia,

⁵⁶ History Magazine, <http://www.historynet.com/mh/bl-mongol-invasion/index-html>, 4/3/2006, 1.

⁵⁷ Ibid., 1.

⁵⁸ B. H. Liddell Hart. *Strategy*. (New York: Meridan Publishing, 1991), 62.

while Kaidu drove thru Poland providing the ruse. Sabutai forward deployed spies/scouts to ascertain the political, military, and economic conditions of the areas the Mongol army would march through and eventually attack.⁵⁹

Sabutai used this early intelligence to build understanding of the inter-relationships of the nobles and kingdoms and to ascertain if a side attack to Poland would split noble alliances.⁶¹ The nobles definitely did not provide a united front and Kaidau took advantage and struck Sandomir and other small towns enroute to seek King Wenceslas of Bohemia and to draw Duke Henry II of Silesia onto a plain surrounded by low hills, the perfect location for an ambush.⁶²

The Mongols were a forward fighting force with no set “home base” or quick route to their home territories; they fought with the men at hand and aimed for a quick, decisive victory. ⁶³ With these limitations at hand, deception and cunning were an integral part to Mongolian warfare, along with the fast horses and leadership by the most capable man not the richest man. In the battle with Duke Henry at Wahlstadt, Kaidu employed attack, false flight and ambush a common steppe tactic.⁶⁴ The knights in their heavy armor depending on close quarter tactics were no match for the swift ponies and light cavalry with bows of the Mongols. Furthermore, the Mongols used advanced communications methods, in particular, pennant/standard signaling, to provide force movement and accountability. ⁶⁵ This “silence” threw the knights off because they could not gauge the enemy location like normal from a battle cry.

The battle started off like any normal skirmish with the two armies clashing on the field, but the Mongols quickly surrounded the slower moving Europeans causing the knights to retreat back to their lines. The knights advanced for two more charges, then the Mongols suddenly retreated and the knights continued pursuit. Then the Mongols presented the first surprise of the day, by calling out “Byegaycze! Byegaycze! or Run!

⁵⁹ History Magazine, <http://www.historynet.com/mh/bl-mongol-invasion/index-html>, 4/3/2006, 3.

⁶¹ Ibid., 3.

⁶² Ibid., 3-4.

⁶³ Ibid., 4.

⁶⁴ Ibid., 5.

⁶⁵ Ibid., 6.

Run! In Polish.”⁶⁶ This call for retreat worked and the knights started departing the battlefield. It was quickly discovered to be a ploy and the knights waded back into battle, but again the Mongols started to withdraw. This tactic, the feigned retreat, was an old Mongolian tactical move to draw the enemy away from the infantry and allow the light cavalry to rain arrows on the uncoordinated enemy and “guide” them toward a preset ambush site.⁶⁶ In addition, the Mongols truly used the fog of war by “pushing” smoke across the battle area to further confuse and decentralize the enemy command and control.⁶⁷

While Kaidu and Duke Henry clashed, Sabutai and his 50,000 men met a force of six times greater size commanded by King Bela IV of Pest at the plain of Mohi, in present day Hungary.⁶⁸ Sabutai marched in three columns, two outer to form a shield for the third, central column. The Mongols were at a force disadvantage, but used the layout of the land and tactical maneuvering to gain the upper hand. They backed over a river and laid claim to the only bridge in the area and protected it with catapults. The Mongols then faced the Europeans and as the assault continued and retreat was imminent they guided the Europeans, started an assault on their left flank, and forced the knights back into their base camp.⁶⁹

The Mongols encircled the camp and left an intentional opening allowing the knights to think they could escape and the Mongols would be none the wiser. In reality, this gap was the trail into the awaiting Mongolian ambush.⁷⁰ As *Military History* magazine said, “The Hungarian retreat degenerated into a panicky, disorderly rout—just as Subotai had calculated it would when he deliberately left them that tantalizing but deceptive escape route.”⁷¹

⁶⁶ History Magazine, <http://www.historynet.com/mh/bl-mongol-invasion/index-html>, 4/3/2006, 6.

⁶⁶ Ibid., 6.

⁶⁷ Ibid., 7.

⁶⁸ Ibid., 7.

⁶⁹ Ibid., 8.

⁷⁰ Ibid.

⁷¹ Ibid.

Military History magazine summons up the victories as “simply exercised discipline, efficiency and order” by the Mongolians.⁷² But it is more than that, the Mongols exploited intelligence of the enemies political, social, economic, and military capabilities to the extent that they knew what areas to attack based on the support, or lack there of, and the number of forces at the locations. By understanding the terrain better than the people who lived there, the Mongols could create lines for feigned withdrawals, designate ambush sites and drive the enemy to the battlefield of choice. Additionally, by managing the information (keeping it secure) the enemy assumed the Mongols were attacking in Poland instead of the main objective of Hungary. The element of surprise was definitely on the Mongolian side whether it was tactics (signally with pennants, fast ponies or smoke on the battleground), guessing the Mongolian main objective or the well-rehearsed ambush tactics. These deceptive tactics allowed the Mongolians to use the minimal number of forces to accomplish a lofty goal and defeat a superior force (in numbers). These same ideas were used almost five hundred years later when the smaller United States revolutionary army meets the British forces.

The Mongols did not embrace all six principles (focus, integration, timeliness, security, objective and centralized control) of Joint Publication 3-58, Joint Doctrine on Military Deception. Sabutai focused on the enemy’s psyche and broke down external support from other military/political leaders, but the Mongols did not target a single adversary leader, per se. Centralized control was not affected, since Sabutai broke the army into two forces to converge on the common objective of Hungary. The Mongols expertly integrated the deception into the overall plan and operational security was applied, in the sense that the Mongolian leadership understood the strategic plan while the field troops and local villagers did not understand what was happening. Finally, the deception was enacted along a specific enough timeline to affect discontent among the royal parties and to allow the Mongolian army to proceed upon planned attack routes. In short, they actualized four, discarded centralized control and partially realized focus. Meanwhile, the Mongols maintained operational advantage of the battlefield through surprise attack routes and formations, information advantage of what royals would pledge

⁷² History Magazine, <http://www.historynet.com/mh/bl-mongol-invasion/index-html>, 4/3/2006, 9.

allegiance to others and security of information from the enemy, allowing economy of force meeting all the necessary objectives of this thesis.

B. U.S. REVOLUTIONARY WAR, 1776-1781

Most have heard the story of General George Washington crossing the Delaware River. However, most do not realize it was the epitome of trickery. General Washington like the Mongols before him sent spies into the enemy camp to collect information and sow the seeds of mistrust. Washington denied information, via counter-espionage and providing false information, which was unusual for warfare at this time.⁷³ He mastered the operational advantage by applying security (providing false data to spies and keeping planning to those who needed to know); information advantage (using spies, information denial) and surprise that allowed his already economized force to succeed.

The Continental Army was facing a rough winter in 1776-77 in New Jersey with little food, improper clothing, low supplies, and a dwindling force and men returned to their homes. The British, on the other hand, were well-fed, armed, and more importantly only fifty miles away.⁷⁴ Washington had to figure out how to get the upper hand and do it quickly, before the British realized the pathetic state of the Continental Army.

The first act of deception was to give the manifestation of a much larger force. An age-old tactic is to station a man or two at a campfire and light many fires and over a wide area to it seems a larger army. In Washington's time of staying at the local inns and family homes, he stretched his men across many dwellings so "creating an illusion among the civilians that there were American soldiers wherever a person looked".⁷⁵

Washington knew the area was crawling with Tory spies and used this to his advantage to feed them false information, rumors and bogus troop counts. The bogus troop numbers even ended up in the hands of General Howe, commander of the British forces in the area, and convinced him not to assault the strong Continental Army.⁷⁶ Washington intelligence and disinformation campaign was brilliant because he listened to

⁷³ Peter F. Stevens. Early Disinformation Campaign. *Military History* (Jun 1992), 12.

⁷⁴ *Ibid.*, 12.

⁷⁵ *Ibid.*, 16.

⁷⁶ *Ibid.*

the feedback mechanisms from the British, but more importantly he fed into their receivers at many angles. The British receiving the data from so many different sources assumed that it could only be true.

Washington's stratagem was to trick the British into believing the Continentals were to attack Philadelphia and New York. The Continental forces rounded up boats and "prepared" for an amphibious assault and presented the impression to the ever-present Tory spies that an all out assault was in the making.⁷⁷ Besides the visual deception, Washington kept the intelligence deception ready with false message written in his own hand and keeping the enemy in mind, realizing he could not cross the invisible barrier of passing to much information and maintaining plausibility. Washington used the ploy, to attack New York City, again in 1781. It was a well-known fact that he wanted to siege the city and used this to his advantage to trick the British into moving their forces toward the city.⁷⁸ Instead, he marched his men south giving the appearance of an offensive on New York, but changed course in Virginia and went to Yorktown to assist Lafayette and the French ultimately ending with General Cornwallis' defeat and the tide turned to the Colonial and the War for Independence was essentially won.⁷⁹

General Washington simply used the British prejudices about the colonists, colonial tactics, and assumed troop strengths against the stronger nation. He skillfully feed false data into their "receivers" and trusted agents and maintained very tight security over the intelligence he shared with his own staff to keep the ruses credible. He used his understanding of the terrain, the British, his own limitation (men, militia assistance, supplies, ammo) to wield operational deceptions and dexterously applied these against the English war machine allowing the smaller nation to claim victory (economy of force). The Washington's lessons were not forgotten as they were used eighty years later in the War Between the States.

General Washington, to a point, applied the six principles of Joint Publication 3-58. Washington did not focus on a single leader (General Howe), rather he populated

⁷⁷ Peter F. Stevens. Early Disinformation Campaign. *Military History* (Jun 1992), 16.

⁷⁸ James Dunnigan and Albert Nofi. *Victory and Deceit: Dirty Tricks at War*. (New York: William Morrow and Company, Inc., 1995), 97.

⁷⁹ *Ibid.*, 98.

illusions about his force strength and hoping the information would end up in any British military leadership hands. He centrally controlled deception, and in many instances centrally executed (memos in his own hand), while decentralized for troop lodging to boost the force numbers. In addition, he definitely integration deception into the main strategy and executed it along very specific timelines expertly utilizing the feedback loop of information. Because he controlled the operational security of the information so tightly he was able to meet the objective of having the British forces turn or retreat, as he desired. General Washington also met the objectives of the thesis by applying operational advantage to the battlefield. He implemented information advantage via deceptive manning numbers and false plans of attack, keeping the information close hold at all times and enabling the economy of force by default based on his weaker troop strength.

C. U.S. CIVIL WAR

Union Major General William S. “Old Rosey” Rosecrans outwitted the Rebels at the battle of Tullahoma-Chattanooga in 1863, part of the Chickamauga campaign, by misleading on where he would cross the Tennessee River.⁸⁰ Rosecrans’ force of 65,000 men was not something that could be hidden from the people as they traversed the land and intelligence was always following to the Confederates about the army’s movements. His forces were constantly skirmishing with General Braxton Bragg’s army and eventually ended up at Chattanooga and Murfreesboro in central Tennessee.⁸¹

Rosecrans spread his army out over eighty miles permitting them time to recuperate and replenish supplies for over a month while the Confederate army did the same. During this time, General Rosecrans, who according to Dunnigan and Nofi was a “meticulous planner” about how he would engage the enemy and which area was best suited to a battle, for example across the Tennessee River.⁸² He decided upon the classic

⁸⁰ Maurice D’Aoust. “Hoodwinked During the Civil War” Union Military Deception Appearances could be misleading on the battlefields of the Civil War.” *Civil War Times*, May 2006, 1.

⁸¹ James Dunnigan and Albert Nofi. *Victory and Deceit: Dirty Tricks at War*. (New York: William Morrow and Company, Inc., 1995), 122.

⁸² *Ibid.*

feint of attacking one area, in this case Chattanooga, while hiding his real objective of crossing the river at diverse locations. Brigadier General William B. Hazen led the feint and described it as,

...As if trying to cross the river at different points for 40 miles above the town, and succeeded in so deceiving them as to induce them to use an entire army corps to prevent the execution of such purpose...Details were made nearly every night to build camp fires indicating larger camps, and by throwing boards upon others and hammering on barrels and sawing up boards....we made them believe we were preparing to cross with boats.⁸³

This feint and two more feints, basically delaying tactics, allowed Rosecrans' army to cross the river almost unhindered and ready to attack the Rebels from behind.

General Rosecrans had the ultimate in operational advantage permitting the precise execution of the ultimate surprise: placing the Rebels in three separate flanking movements. From fires magnifying the number of available forces and their locations to securing the actual crossing routes to contrived scuffles to shelling Chattanooga, he maintained the upper hand and directed General Bragg's actions.⁸⁴ Spies abounded, as they do in war, and he fed into the Rebel communications channels the right information via voice and deed to throw them off the truth. Gen Rosecrans' security measures kept the Rebels guessing about the real force numbers and actual river crossing routes so that it was almost eighteen days before the Rebels realized the Union Army had crossed and was advancing.⁸⁵ Another brilliant execution of information advantage, security and surprise utilizing economy of force, occurred when General Hazen's brigade was used to divert the Confederate forces. But can these deception tactics be applied in modern warfare with satellite imagery, listening devices, instant communication, and smart weapons?

General Rosecrans applied most of the six principles of Joint Publication 3-58. Rosecrans' objective was to cross the river and to cause the Rebels to attack in patterns that would allow successful river crossings for his men. He did not have to focus on the

⁸³ Maurice D'Aoust. "Hoodwinked During the Civil War" Union Military Deception Appearances could be misleading on the battlefields of the Civil War." *Civil War Times*, May 2006, 2.

⁸⁴ Dunnigan and Nofi, 124.

⁸⁵ Ibid.

decision maker as much as the intelligence apparatus to presume he had more men and in different locations than reality. Rosecrans accomplished this deception thru decentralized execution down to the lowest private. He integrated the deception into the plan to attack and control Chattanooga and permitted enough time for the Rebel forces to believe the Yankee forces outnumbered them. Finally, he practiced good operational security by sending false signals through the Rebel communication/intelligence channels. Rosecrans too, met the premise of this thesis by achieving operational advantage of the battlefield through surprise, information advantage and security. He did not necessarily arrive at economy of force, however fewer forces were needed in the battle and risked death or capture.

D. HEZBOLLAH

Hezbollah used surprise and strived for an information advantage to execute deception. The need for Hezbollah to use deception was particularly acute because it was outnumbered relative to its opponent—the Israeli Defense Force—and must practice economy of force. Hezbollah practiced deception operations against the Israeli army; first, they “deployed the perception of its followers as men in search of martyrdom”.⁸⁶ Hezbollah became the first organization to widely use suicide bombers; this tactic definitely unsettled the Israeli Defense Forces. Dr. Augustus Norton states that martyrdom has “transformed from an exemplary act of suffering and sacrifice into an inspiring model for revolution and action”.⁸⁷ Hezbollah refers to the Israeli forces as “Yazidis” comparing them to the oppressors of Imam Husayn and bringing renewed religious fervor to bear against the Israeli occupiers, bringing information advantage into the fight.⁵⁵ Hezbollah used the information advantage in the form of martyrdom and a religious cause to keep the Israeli’s guessing as to the next move, furthermore then practiced surprise thru cover and concealment.

Hezbollah practiced psychological operations by winning the numbers game of “our side has fewer dead than yours,” affecting the will of the Israeli people to continue the fight in Lebanon. In the late 1980s the ratio of Hezbollah to Israeli Defense Forces

⁸⁶ Augustus Norton. “Hizballah and the Israeli Withdrawal from Southern Lebanon.” *Journal of Palestine Studies* 28 (Autumn 2000): Retrieved from JSTOR (www.jstor.org) on 4/16/2006, 27.

⁸⁷ *Ibid.*, 25.

(IDF)/Southern Lebanese Army (SLA) losses was 5:1, which dropped to 2:1 by 1995.⁵⁶ Hezbollah had turned toward a more organized guerilla warfare force using better tactics, planning, and intelligence. Sheikh Nabil Qaouk, Hezbollah's chief of military operations, provides ample illustrations of deceptive tactics: Soviet T55 tanks hidden in caves (concealment) and firing at Israeli positions; remote-controlled anti-tank rockets, guided in flight; jamming of Israeli radar and closed-circuit television monitors (electronic warfare/displays/false info).⁵⁷ Qaouk also spoke to "low-tech methods of guerilla warfare" such as: artificial boulders (camouflage) to hide roadside bombs, explosives hidden in tree branches at shoulder/head level (concealment), herds of sheep used to throw off Israeli heat-seeking equipment while the Hezbollah forces changed locations (surprise).⁵⁸ As a final insult, the Hezbollah fighters could blend back into the population after an operation and people would hide them.⁵⁹ Hezbollah exploited improvised explosive devices (IEDs) to stop the mobility of the IDF/SLA forces.⁶⁰ This in turn forced the Israelis to stay in their bunkers and not venture out on the roads for fear for being blown up and gave the operational advantage to the Lebanese to control the area.

Further pushing the Israeli people toward withdrawal were the broadcasts from al-Manar (the Beacon), Hezbollah's main satellite station, which reached Israel and provided a nightly dose of images (of dead IDF soldiers).⁶¹ Al-Manar provided demoralization of the Israelis on a nightly basis, but also a morale boost to the Lebanese and Arabs of the region each time Israel lost another battle. The station also played reels of suicide bombers, Hezbollah military actions (usually victories), and anything to unnerve the Israeli public. This information warfare/advantage tactic was done to press home to the Israelis how many of their own were dying every day, how great militarily the Lebanese were (especially with the IDF hunkered down in bunkers), and to push the

⁵⁶ Augustus Norton. "Hizballah and the Israeli Withdrawal from Southern Lebanon." *Journal of Palestine Studies* 28 (Autumn 2000): Retrieved from JSTOR (www.jstor.org) on 16 April 06, 30.

⁵⁷ Judith Harik. *Hezbollah: The Changing Face of Terrorism*. (London: I.B. Tauris, 2004), 132.

⁵⁸ *Ibid.*, 132.

⁵⁹ Judith Harik. *Hezbollah: The Changing Face of Terrorism*. (London: I.B. Tauris, 2004), 132.

⁶⁰ Augustus Norton. "Hizballah and the Israeli Withdrawal from Southern Lebanon." *Journal of Palestine Studies* 28 (Autumn 2000): Retrieved from JSTOR (www.jstor.org) on 16 April 06, 30.

⁶¹ *Ibid.*, 31.

Israelis to pressure their own government to pull out of Lebanon. Hezbollah and the Lebanese people in general, did not want to invade Israel or seize back Jerusalem; they just wanted their land back.

Hezbollah used the massacre at Qana, part of Operation Grapes of Wrath, to their advantage also. They had video and photos of the incident and showed the world that Israeli was not attacking to protect itself, but rather attacking innocent citizens and thereby committing terrorism and genocide, the very thing it accused Hezbollah of committing. After the Qana massacre, or any other major IDF assault, Hezbollah fighters would gather in mass with shovels to greet returning refugees to help rebuild their homes. They showed the people of Lebanon, and by default the people of Israeli, that Hezbollah was there to rebuild the region.⁶² Hezbollah also played up the David versus Goliath image, as the little guerilla group fighting the better-equipped and large force of the IDF.⁶³ This gave Hezbollah a popular image in the predominately Arab region as the fighter for the people who will stand up to the evil giant of Israel. Hezbollah was not afraid to show their losses and defeats and broadcast them nightly on al-Manar television, giving voice to “the righteous fury backed up by unassailable national rights”.⁶⁴

Hezbollah forces that carried video cameras on most operations documented these losses. In 1997, Hezbollah discovered an Israeli plan to infiltrate a commando squad into Lebanon to either kidnap or kill a Hezbollah political leader.⁶⁵ They video-taped the elimination of the entire squad as they moved right into the Hezbollah ambush.⁶⁶ This incident demoralized the Israeli public and frustrated the Israeli media who were not allowed access to the mission. Furthermore, it fed into Hezbollah’s claim that the Israelis were terrorists since they were sending assassination squads into another country. This act alone united the Lebanese across religious differences.

⁶² Augustus Norton. “(In)security Zones in South Lebanon.” *Journal of Palestine Studies* 23 (Autumn 1993): 61-79. Retrieved from JSTOR (www.jstor.org) on 16 April 06, 73.

⁶³ Judith Harik. *Hezbollah: The Changing Face of Terrorism*. (London: I.B. Tauris, 2004), 134.

⁶⁴ *Ibid.*, 134.

⁶⁵ *Ibid.*, 130.

⁶⁶ *Ibid.*

Hezbollah had to appeal to the Christian as well as the Muslim Lebanese population and they accomplished this through astute political acumen. Sayyed Fadlallah, the Party of God's spiritual leader, has the gift of speech and elucidates Hezbollah's vision that "makes sense not only to secular Muslims but to Christians as well".⁶⁷ Fadlallah couched Hezbollah's acts, whether suicide bombings or military attacks, in Arab nationalist prose to appeal to all Lebanese regardless of religious affiliation.⁶⁸ Judith Harik calls this ideological ambiguity and declares it an important strategy to broaden support.⁶⁹ Hezbollah has perfectly presented their argument in info warfare terms, presenting a religious jihad as a secular nationalist movement.

Hezbollah expertly implements its information advantage. They have made the media a tool of the intelligence/information campaign and use the airwaves to hit all the "channels" of the enemy to include their populace. Media propagation enables Hezbollah to expand a normal information advantage to plant false ideas on a larger scale and to manipulate video and voice to guarantee more support. This in turn enables their economy of force by gaining "forces" in the populace and neighboring countries and possibly expanding the "spy" network further enabling the info advantage. Finally, security ties into the equation because it is a population, religiously centered, fighting against the enemy for a way of life and no secrets will be leaked to the enemy in that situation.

Hezbollah practiced some of six principles of Joint Publication 3-58 with great effect. The focus was always the civilian and military leaders with the goal to force their hand to leave the disputed lands and Hezbollah applied suicide bombs and psychological operations to have the Israeli people persuade their leaders to depart. The objective was simple: Israeli Defense Force and Israeli people leave Lebanese land. Hezbollah centrally controlled the Lebanese "forces" and allowed them to execute raids and attacks at the lower levels with the thought that any attack would assist the "cause". Operational security is easier when the two people have a quarrel for centuries and do not interact.

⁶⁷ Judith Harik. *Hezbollah: The Changing Face of Terrorism*. (London: I.B. Tauris, 2004), 70.

⁶⁸ *Ibid.*, 70.

⁶⁹ *Ibid.*, 71.

Timeliness is not a factor since it is an ongoing campaign, however technology has allowed multiple information channels (radio, television, satellite) to be used as propaganda at any given time. Finally, deception is integrated into military and political plans. Hezbollah met the premise of this thesis by achieving operational advantage of the battlefield through surprise attacks, suicide bombings and information advantage via technological means. Security is applied in the strictest sense, neighbors do not inform on each other for fear of death or reprisal. Based on the overwhelming odds, troops and weapons, Hezbollah started out with economy of force and used it to their advantage.

THIS PAGE INTENTIONALLY LEFT BLANK

IV. CONCLUSIONS

I have always believed in doing everything possible in war to mystify and mislead one's opponent⁷⁰

A.P. Wavell

As we said at the outset, Joint Publication 3-58 outlines six principles for the conduct of deceptive military operations: focus, objective, centralized control, security, timeliness, and integration. 1) *Focus* refers to the target of the deception operation--the target is the adversary decision maker who decides the adversary's courses of action, it is not the intelligence system which is a conduit or channel for information flow; 2) *Objective* is your intention, which is to cause the enemy to take (or not to take) a specific action; 3) *Centralized Control* defines the organization of the operation, directed and controlled by a single element with decentralized execution; 4) *Security* refers to the operational security, only the people who need to know are told about the operation and the ability to protect the plan(s) from the enemy; 5) *Timeliness* is allowing sufficient time for the adversary force to analyze the deceptive information, react as required and for the friendly feedback loop to notice the action; and 6) *Integration* means incorporating the deception plan into the basic operational plan, ensuring both occur simultaneously.

The case studies have shown that not all six principles are required for a successful deception operation. In fact, focus appears to be the least required when on the battlefield, the will of the people and possible coalitions between nations are just as effective targets. Centralized control was also not as important especially if it can be centrally instead of decentrally executed, like the Mongols and General Washington. Operational security, integration, timeliness and objective were important factors in all the case studies. Objective is a given in any situation though, without a reason then there is no cause for the operation. While the six joint principles are imperative to warfare, true operational advantage is obtained through surprise, information advantage and security, which can lead to economy of force.

⁷⁰ Jon Latimer. *Deception in Warfare* (Woodstock, NY: Overlook Press, 2001), 71.

Surprise is used to confuse the enemy, deceive them about the force size/components, time of attack, location of attack, and intent. Surprise is enhanced by proper information advantage, which in essence is good intelligence and more importantly proper use of the intelligence data, and keeping the info as need to know (security). Ultimately, this can lead to economy of force; applying minimal manpower to outwit rather than out gun the enemy. Throughout history from the Mongols in 1241 to Hezbollah today having the better intelligence, applying it plausibility and through the right channels, all the while maintaining your secrets and real objectives is the key to victory.

Richard Betts' article, "Surprise Despite Warning: Why Sudden Attacks Succeed", saying detecting a threat is not enough, it must be properly channeled, understood and properly relayed.⁷¹ Betts further believes deception is cheap, requiring little investment of men or material.⁷² But I disagree, intelligence and formulating the deception is not a cheap exercise, nations must make better use of their intelligence services and expand information operations through media channels to receive real benefits.

If information advantage is properly formulated, carried out, and secured, it is a force magnifier and essential to warfare. Information advantage is even more important in modern warfare where instantaneous coverage can quickly give away positions and My Space pages are an operations security nightmare. It is becoming more difficult to maintain positive security of information and intelligence as computers are the source and holder of knowledge and hackers abound, but now more than ever need to know is imperative. Smart weapons proliferate the notion of economy of force and as military forces downsize worldwide there use will expand as countries purchase them.

Information advantage and surprise is for naught if operational security is not maintained. Controlling who knows the plan and where the information is stored are essential to minimizing a leak. In today's world of satellite imagery, the World Wide

⁷¹ Richard Betts. "Surprise Despite Warning: Why Sudden Attacks Succeed," *Political Science Quarterly* 95 (Winter 1980-81): 555.

⁷² *Ibid.*, 564.

Web, telephones, etc information is moving at lightening speed and unless properly protected can be pieced together by the enemy to show the bigger picture.

History has proven that understanding your enemy, political environment, terrain, media/intelligence inputs and outputs along with proper implementation of info advantage and security are force multipliers and causes of victory. Proper utilization of deception at the tactical and operational level is essential, especially in this era of insurgency and “three block” warfare. In short, to achieve U.S. objectives in Iraq and elsewhere, smaller U.S. forces are going to have to outwit, not just out gun, the enemy.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX – JOPE IO (MILITARY DECEPTION) GUIDANCE⁷³

The guidance in this annex relates to the development of Tab A (Military Deception) of Appendix 3 (Information Operations) to Annex C (Operations) of the OPLAN/CONPLAN/OPORD/campaign plan/functional plan format found in CJCSM 3122.03, “Joint Operation Planning and Execution System, Volume II, Planning Formats and Guidance.”

1. Situation

a. General. What is the general overall situation concerning military deception?

b. Enemy

- General Capabilities. What are the enemy military capabilities relating directly to the planned deception?

- Deception Targets. What are the deception targets?

- Target Biases and Predispositions. What are the target biases and predispositions?

- Probable Enemy COA. What is the probable enemy COA? (Refer to Annex B (Intelligence) of the basic plan.)

c. Friendly

- What is the friendly forces situation?

- What, if any, are the critical limitations?

- What is the concept of friendly operations?

d. Assumptions

- What are the assumptions concerning friendly, enemy, or third-party capabilities, limitations, or COAs?

- What conditions does the commander believe will exist when the plan becomes an order.

⁷³ Joint Publication 3-13: Joint Doctrine for Information Operations (Washington DC: Government Printing Office), B-A-1 thru B-A-3.

2. Mission

a. Operational Mission. See paragraph 2 of the basic plan or order.

b. Deception Mission

- Deception Goal. What is the desired effect or end state the commander wishes to achieve?

- Deception Objective(s). What is the desired action or inaction by the adversary at the critical time and location?

- Desired Enemy Perceptions. What must the deception target believe for him/her to make the decision that will achieve the deception objective?

- Deception Story. What scenario will cause the deception target to adopt the desired perception? Consider one of the COAs discarded during plan preparation.

3. Execution

a. Concept of the Operation

- General. What is the framework for the operation? Include a brief description of the phases of the deception operation.

- Other IO Capabilities

- What other capabilities will be used to support the deception operation?

- What are the other plans and operations pertinent to the deception?

- What coordination and deconfliction is required?

- Feedback and Monitoring

- What type of feedback is expected, if any, and how will it be collected?

- What impact will the absence of feedback have on the plan?

- Means. By what means will the deception be implemented?

- Tasks. What are the execution and feedback taskings to organizations participating in the execution and monitoring of the deception?

- Risks

- Deception is successful. What is the likely adversary response? What will be the impact on friendly forces from adversary intelligence sharing?

- Deception fails. What is the impact if the deception target ignores the deception or fails in some way to take the actions intended?

- Deception is compromised to multinational partners or adversaries. What is the impact of such compromise on friendly forces and attainment of friendly objectives?

- b. Coordinating Instructions

- What are the tasks or instructions listed in the preceding subparagraphs pertaining to two or more units?

- What is the tentative D-day and H-hour, if applicable, and any other information required to ensure coordinated action between two or more elements of the command?

4. Administration and Logistics

- a. Administration

- General. What are the general procedures to be employed during planning, coordination, and implementation of deception activities?

- Specific. What, if any, are the special administrative measures required for the execution of the deception operation?

- b. Logistics. What are the logistics requirements for the execution of the deception operation (transportation of special material, provision of printing equipment and materials)?

- c. Costs. What are the applicable costs associated with the deception operation?

NOTE: Do not include those administrative, logistics, and medical actions or ploys that are an actual part of the deception operation.

5. Command, Control, and Communications

- a. Command Relationships

- Approval. What is the approval authority for execution and termination?

- Authority. Who are the designated supported and supporting commanders and supporting agencies?

Oversight. What are the oversight responsibilities, particularly for executions by non-organic units or organizations outside the chain of command?

- **Coordination**

- What are the in-theater coordination responsibilities and requirements related to deception executions and execution feedback?

- What are the out-of-theater coordination responsibilities and requirements related to deception executions and execution feedback?

- b. **Communications**

- What are the communications means and procedures to be used by control personnel and participants in the deception operation?

- What are the communications reporting requirements to be used by control personnel and participants in the deception operation?

6. Security

- a. **General.** What are the general security procedures to be employed during planning, coordination, and implementation of deception activities?

- b. **Specific**

- What are the access restrictions and handling instructions to the deception appendix or plan?

- Who has authority to grant access to the deception appendix or plan?

- How will cover stories, codewords, and nicknames be used?

- How will planning and execution documents and access rosters be controlled and distributed?

LIST OF REFERENCES

- Bowyer Bell, J. and Barton Whaley. *Cheating and Deception*. Somerset, NJ: Transaction Publishers, 1991.
- Caldwell, J. *Deception 101: Primer on Deception*. Retrieved 20 February 2006 from Strategic Studies Institute website: <http://www.carlisle.army.mil/ssi/>.
- Carr, C. (ed). *The Book of War*. NY: Random House, 2000.
- D'Aoust, Maurice. "Hoodwinked During the Civil War" Union Military Deception Appearances could be misleading on the battlefields of the Civil War." *Civil War Times*, May 2006. Retrieved 3 April 2006 from The History Net: <http://www.historynet.com/cwt/bl-union-military-deception/index.html>.
- Daniel, Donald and Katherine Herbig, (eds). *Strategic Military Deception*. Elmsford, NY: Pergamon Press, 1982.
- Daniel, Donald and Katherine Herbig. "Propositions on Military Deception." In *Strategic Military Deception*. Elmsford, NY: Pergamon Press, 1982.
- Daniel, Donald and Katherine Herbig. "Deception in Theory and Practice." In *Strategic Military Deception*. Elmsford, NY: Pergamon Press, 1982.
- Dietz, Mary. "Trapping The Prince: Machiavelli and the Politics of Deception," *The American Political Science Review* 80 (September 1986): 777-799. Retrieved 5 April 2006 from JStor: <http://www.jstor.org/>.
- Godson, Roy and James Wirtz (eds). *Strategic Denial and Deception: The Twenty-First Century Challenge*. New Brunswick: Transaction Publishers, 2003.
- Griffith, Samuel (Translator). *Sun Tzu: The Art of War*. London: Oxford University Press, 1963.
- Handel, Michael. "Intelligence and Deception." In *Military Deception and Strategic Surprise*. London: Frank Cass and Co., Ltd, 1982.
- Hart-Liddell, B.H. *Thoughts on War*. Ann Arbor: University Microfilms International, 1944.

- Heinl, Robert. Jr. *Dictionary of Military and Naval Quotations*. Annapolis, MD: U.S. Naval Institute, 1966.
- Hildinger, Erik. "Mongol Invasion of Europe in 1241." *Military History*, June 1997.
Retrieved 3 April 2006 from The History Net: <http://www.historynet.com/mh/bl-mongol-invasion/index/html>.
- Kopp, Carlo. "Classical Deception Techniques, Perception Management, Propaganda, Advertising." Retrieved on 2 May 2006 from Monash University, Australia:
<http://www.csse.monash.edu.au/courseware/cse468/Lectures/CSE-468-08.pdf>.
- Latimer, Jon. *Deception in Warfare*. Woodstock, NY: Overlook Press, 2001.
- Levite, Ariel. *Intelligence and Strategic Surprise*. New York: Columbia University Press, 1987.
- Machiavelli, Niccolo. *The Prince*. NY: New American Library, 1952.
- Palmer, Dave R. *The Way of the Fox: American Strategy in the War for America, 1775-1783*. Westport, Connecticut: Greenwood Press, 1975.
- Quinn, Tom. *Military's Strangest Campaigns and Characters*. London: Robson Books, 2006.
- Reese, William. "Deception Within a Communications Theory Framework." In *Strategic Military Deception*. Elmsford, NY: Pergamon Press, 1982.
- Reese, William and Barton Whaley. "Understanding Strategic Deception: An Analysis of 93 Cases." In *Strategic Military Deception*. Elmsford, NY: Pergamon Press, 1982.
- Sherwin, Ronald. "The Organizational Approach to Strategic Deception: Implications for Theory and Policy." In *Strategic Military Deception*. Elmsford, NY: Pergamon Press, 1982.
- Stevens, Peter. "Early Disinformation Campaign." *Military History*, June 1992. Handout from Dr. Hy Rothstein for Deception course.
- Tugwell, M. (ed). *Deception Operations: Studies in the East-West Context*. London: Brassey's, 1990.

Von Clausewitz, Carl. *On War*. London: Penguin Books, 1968.

Whaley, Barton. *Strategem: Deception and Surprise in War*. Cambridge, MA: MIT Center for International Studies, 1969.

Whaley, Barton. "Toward a General Theory of Deception." In *Military Deception and Strategic Surprise*. London: Frank Cass, 1982.

World of Quotes.com, Retrieved on 29 May 2006, <http://www.worldofquotes.com>.

THIS PAGE INTENTIONALLY LEFT BLANK

BIBLIOGRAPHY

- Arquilla, John, and David Ronfeldt, eds. *Networks and Netwars: The Future of Terror, Crime, and Militancy*. Santa Monica: RAND, 2001.
- Axelrod, Robert. "The Rational Timing of Surprise," *World Politics* 31 (Jan 1979): 228-246. Retrieved 15 April 2006 from JStor: <http://www.jstor.org/>.
- Bowyer Bell, J. "Dragonworld (II): Deception, Tradecraft and the Provisional IRA," *International Journal of Intelligence and Counterintelligence* 8 (1995): 21-50.
- Betts, Richard. "Surprise Despite Warning: Why Sudden Attacks Succeed," *Political Science Quarterly* 95 (Winter 1980-81): 551-572. Retrieved 5 April 2006 from JStor: <http://www.jstor.org/>.
- Bok, Sissela. *Lying: Moral Choice in Public and Private Life*. New York: Vintage Books, 1999.
- Callwell, C.E. *Small Wars: Their Principles and Practice*. Lincoln, NE: University of Nebraska Press, 1996.
- Charlton, James (ed). *The Military Quotation Book*. NY: St. Martin's Press, 1990.
- Cline, Lawrence. Pseudo Operations and Counterinsurgency: Lessons from Other Countries. Retrieved 20 February 2006 from Strategic Studies Institute website: <http://www.carlisle.army.mil/ssi/>.
- D'Aoust, Maurice. "Hoodwinked During the Civil War: Union Military Deception Appearances could be misleading on the battlefields of the Civil War," *Civil War Times Magazine* (May 2006). Retrieved 3 April 2006 from <http://www.historynet.com/cwti/bl-union-military-deception/index.html>.
- Daniel, Donald and Katherine Herbig (eds). *Multidisciplinary Perspectives on Military Deception*. Naval Postgraduate School report for the Office of Research and Development, Central Intelligence Agency, 1980.
- DeWar, M. *The Art of Deception in Warfare*. Newton, Abbott, and Devon, England: David and Charles Publishers, 1989.

- Dunnigan, James. and Albert Nofi. *Victory and Deceit: Dirty Tricks at War*. New York: William Morrow and Company, Inc., 1995.
- Farquhar, Michael. *A Treasury of Deception*. London, England: Penguin Books, 2005.
- Field Manual 90-2: Battlefield Deception*. Washington, DC: U.S. Army, 1988.
- Fowler, Charles and Robert Nesbit. "Tactical Deception in Air-Land Warfare," *Journal of Electronic Defense* (June 1995): 37-44, 76-79.
- Gardner, Brian. *Allenby*. London: Cassell and Co, Ltd., 1965.
- Gerwehr, Scott and Russell Glenn. *The Art of Darkness*. Santa Monica, CA: RAND, 2000.
- Gooch, John and Amos Perlmutter (eds). *Military Deception and Strategic Surprise*. London: Frank Cass, 1982.
- Greenberg, Irwin. "The Role of Deception in Decision Theory," *The Journal of Conflict Resolution* 26 (March 1982): 139-156. Retrieved 5 April 2006 from JStor: <http://www.jstor.org/>.
- Handel, Michael. "The Yom Kipper War and the Inevitability of Surprise" *International Studies Quarterly* 21 (September 1977): 461-502. Retrieved 5 April 2006 from JStor: <http://www.jstor.org/>.
- Handel, Michael (ed). *Intelligence and Military Operations*. London, England: Frank Cass, 1990.
- Harik, Judith. *Hezbollah: The Changing Face of Terrorism*. London: I.B. Tauris, 2004.
- Hart-Liddell, B. H. *Strategy*. New York: Meridan Publishing, 1991.
- Heuer, Richards. "Cognitive Factors in Deception and Counterdeception." In *Strategic Military Deception*. Elmsford, NY: Pergamon Press, 1982.
- Higginbotham, Benjamin. On Deceiving Terrorists. Master's Thesis. Naval Postgraduate School, 2001.

- Hildinger, Erik. (1997). Mongols invaded Europe in 1241. *Military History*, June 1997.
Retrieved 3 April 2006, from <http://www.historynet.com/mh/bl-mongol-invasion/index.html>.
- Hughes, Matthew. *Allenby and British Strategy in the Middle East, 1917-1919*. London: Frank Cass, 1999.
- Jajko, Walter. "Deception: Appeal for Acceptance; Discourse on Doctrine; Preface to Planning," *Comparative Strategy* 21 (2002): 351-363.
- Joint Publication 3-13: Joint Doctrine for Information Operations*. Washington DC: Government Printing Office: 2006.
- Joint Publication 3-58: Joint Doctrine for Military Deception*. Washington DC: Government Printing Office, 1996.
- Keegan, John. *The Face of Battle*. NY: Penguin Books, 1976.
- Keegan, John. *The Mask of Command*. NY: Penguin Books, 1987.
- Kidder, Rushworth. *How Good People Make Tough Choices*. New York: Fireside, 1996.
- Leonard, Robert. *The Principles of War for the Information Age*. NY: Ballantine Books, 1998.
- Lieber, Keir. "Grasping the Technological Peace: The Offense-Defense Balance and International Security," *International Security* 25 (Summer 2000): 71-104.
Retrieved 10 May 2006 from JStor: <http://www.jstor.org/>.
- Lloyd, M. *The Art of Military Deception*. London: Leo Cooper, 1997.
- Luttwak, Edward. "The Operational Level of War," *International Security* 5 (Winter 1980-81): 61-79. Retrieved 5 April 2006 from JStor: <http://www.jstor.org/>.
- McIvor, Anthony (ed). *Rethinking the Principles of War*. Annapolis, MD: Naval Institute Press, 2005.
- McRaven, William. *SpecOps: Case Studies in Special Operations Warfare Theory and Practice*. Navato, CA: Presidio Press: 1995.

- Melshen, P. Pseudo-Operations: The Use of British and American Armed Forces for Deception in Counter-Insurgencies, 1945-1973. PhD Dissertation, University of Cambridge, 1995.
- Mihalka, Michael. *German Strategic Deception in the 1930s*. Santa Monica: RAND, 1980.
- Norton, Augustus. "Hizballah and the Israeli Withdrawal from Southern Lebanon." *Journal of Palestine Studies* 28 (Autumn 2000): 22-35. Retrieved 16 April 2006 from JSTOR (www.jstor.org).
- Norton, Augustus. "Hizballah: From Radicalism to Pragmatism?" *Middle East Policy* 5:4 (January 1998). Provided by the Dr. Robinson.
- Norton, Augustus. "(In)security Zones in South Lebanon." *Journal of Palestine Studies* 23 (Autumn 1993): 61-79. Retrieved 16 April 2006 from JSTOR (www.jstor.org) on Oman, C.W.C. *The Art of War in the Middle Ages, AD 378-1515*. Ithaca, NY: Cornell University Press, 1953.
- Owen, David. *Battle of Wits: A History of Psychology and Deception in Modern Warfare*. London: Leo Cooper, 1978.
- Sawyer, Ralph (translator). *The Seven Military Classics of Ancient China*. Boulder, CO: Westview Press, 1993.
- Stanley, Zell. *An Annotated Bibliography of the Open Literature on Deception*. Santa Monica, CA: RAND, 1985.
- Stetch, Frank and Chris Elsaesser. "Deception Detection by Analysis of Competing Hypothesis" Retrieved on 23 May 2006 from The Mitre Corporation: <http://www.mitre.org>
- Stevens, Peter F. (1992) Early Disinformation Campaign. *Military History*, 12-17. Provided by Dr. Rothstein for NPS Military Deception course.
- Van Fleet, John. *Tactical Military Deception*. Master's Thesis, Naval Postgraduate School, 1985.

Van Horne, Winston. "Prolegomenon to a Theory of Deception," *Philosophy and Phenomenological Research* 42 (December 1981): 171-182. Retrieved 5 April 2006 from JStor: <http://www.jstor.org/>.

Wavell, Archibald Sir. *Allenby: A Study in Greatness, The Biography of Field-Marshal Viscount Allenby of Megiddo and Felixstowe*. NY: Oxford University Press, 1941.

THIS PAGE INTENTIONALLY LEFT BLANK

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California
3. Jennifer Duncan
Defense Analysis Department
Monterey, California