

THE PRINCIPLES OF ASYMMETRY

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ABSTRACT

THE PRINCIPLES OF ASYMMETRY by Major Stephen D. Pomper, USA, 69 pages.

Asymmetry is a United States Army doctrinal term. Research indicates that soldiers have a poor appreciation of asymmetry. The concept is often overused or just misused altogether. The cause for this is likely the doctrine itself. The primary Army definition is too encompassing, if not divergent.

This monograph builds from prior research to establish the principles of asymmetry. The ultimate goal of producing principles should allow soldiers to better appreciate a difficult, but important concept in warfare. The expanded purpose will lead to an increased probability that US Army forces will prevail in war.

Appendix D to this monograph provides a summary of the four principles developed.

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The obvious direction to acknowledge assistance in this monograph points the reader to the reference section. Addressing difficult topics in military scholastics is the goal and not the exception. My applause goes to every author in this quest for service and excellence. Each service and section in the Department of Defense plays the leading role to this end.

The less evident thanks are to you. The most you can do is take this work and critique it: disagree, concur, modify and build from it as I have done with others. This is not the end of the discussion on asymmetry, and nor should it be.

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ACRONYMS

ABCA	America-Britain-Canada-Australia
AFDD	Air Force Doctrine Document
AWG	Asymmetric Warfare Group
DIME	Diplomatic, Information, Military, and Economic
DOD	Department of Defense
FM	Field Manual (Army)
FSO	Full Spectrum Operations
GW	Guerrilla Warfare
IW	Information Warfare
JEL	Joint Electronic Library
JFC	Joint Force Commander
JP	Joint Publication
JV	Joint Vision
PME	Professional Military Education
SME	Subject Matter Expert
SOSO	Stability Operations, Support Operations
MCDP	Marine Corps Doctrinal Publication
MOOTW	Military Operations Other Than War
NWP	Naval Warfare Publication
UW	Unconventional Warfare
US	United States
USA	United States Army
WMD	Weapons of Mass Destruction

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CHAPTER 1

INTRODUCTION

We've been talking about asymmetric threats for years. The nature of asymmetric threats is that they're so unpredictable.¹

Lieutenant General William Wallace, *2003 Interview*

This monograph is a direct extension to a 2004 study by the author. The reader is encouraged to review *Asymmetric: Myth in United States Military Doctrine*.² Chapter 2 of this work provides a limited yet sufficient review of this work to supply the reader with an understanding of the research problem in this monograph. Additional information is included to allow the analysis and subsequent conclusions found in Chapters 3 and 4.

Background and Army Problems

The terms asymmetric and asymmetry entered Army jargon on a regular basis near the turn of the 21st Century. The English use of the word provided a convenient adjective to describe recent military operations in the 1990s--unbalanced or unequal. To say that the 1991 and 2003 Gulf Wars were unbalanced would be an understatement; and the absence of a true military-peer competitor to the United States (US) easily justifies the commonly heard, "We have no equal."³ The Army also found itself in a growing number of military operations other than war (MOOTW), or what is now recognized as a subset to full spectrum operations (FSO) that include war and MOOTW: offense, defense, stability and support. The English-defined term had merit and perhaps it still does.

Increasingly, 'asymmetric' penetrates the way soldiers described many things (See Table 4, or "33 Asymmetric Occurrences"). The issue is not relegated to the prevalence of use, but is

¹ William H. Wallace, LTG, interview by Scott Canon, "We Are Trying to Draw Lessons," *Kansas City Star*, 7 November 2003, sec. A, 12.

² Stephen D. Pomper, "Asymmetric: Myth in United States Military Doctrine" (Fort Leavenworth, KS: US Army Command and General Staff College, June 2004).

³ Not the author's opinion, because the US has never had an 'equal.' This note summarizes the argument of asymmetry--a slippery slope for sure.

most often related to its proper use in accordance with doctrine--more often this use is simply incorrect. It may be apparent from Lieutenant General Wallace's 2003 remark that rank and experience are not likely to clarify the matter alone. Chapter 2 addresses this notion directly. Others simply relegate asymmetry to the "next big buzz-word" or fad.⁴

In June 2001, the US Army (USA) elevated asymmetry from slang to doctrine (See Glossary). Field Manual 3-0, *Operations* was the first USA doctrine to define asymmetry:

Asymmetry concerns dissimilarities in organization, equipment, doctrine, capabilities, and values between other armed forces (formally organized or not) and US forces. [Joint Force Commander's] arrange symmetrical and asymmetrical actions to take advantage of friendly strengths and enemy vulnerabilities, and to preserve freedom of action. Engagements are symmetric if forces, technologies, and weapons are similar; they are asymmetric if forces, technologies, and weapons are different, or if a resort to terrorism and rejection of more conventional rules of engagement are the norm.⁵

Operation's concedes that asymmetry has always existed, while still others declare, "it is as old as warfare itself."⁶ Given this enduring proclamation, asymmetry is assuredly important, if not essential in the conduct of warfare. Even Army doctrine admits that the concept is "very significant, [and] perhaps decisive."⁷ Yet the doctrine also admits, "there are always asymmetries between forces." The soldier's conclusion is probably that everything is asymmetric and asymmetry always exists. In one sense this is true, but it also creates a conundrum in application; almost like trying to exploit a military advantage by changing the laws of time. A truly lasting legacy for asymmetry will be based on the USA's ability to foster a word into a concept that "creates exploitable advantages."⁸

Therefore this monograph seeks to help answer the question: Can the US Army increase appreciation for asymmetry via principles? Earlier research by this author identifies that soldiers

⁴ Colin S. Grey, "Thinking Asymmetrically in Times of Terror," *Parameters* (spring 2002): 13.

⁵ Department of the Army, *Field Manual 3-0, Operations* (Washington, D.C. US Government Printing Office, 2001), 4-31. See Appendix C for the FM's complete text.

⁶ Patrick M. Hughes, LTG, "Global Threat and Challenges: The Decade Ahead," Statement of Record from Director, DIA to Congress (1998).

⁷ *FM 3-0, Operations*, 4-31.

⁸ *Ibid.*

have a poor appreciation for asymmetry (see Chapter 2). There is correlation between divergent, if not contradictory, doctrine, sloppy soldier use and this finding. Ultimately, answering the posed question will increase the probability that the Army will achieve ‘significant, perhaps decisive’ and ‘exploitable’ advantages in future conflicts regardless of which ‘spectrum’ it finds itself in. The Army’s newly formed “Asymmetric Warfare Group” (AWG) supports the reality of the existing problem.⁹ This ad-hoc training task force is similar to the 1960’s Studies and Observation Group (SOG) that wrestled with unconventional warfare and Army success in Vietnam.¹⁰

The answer to the proposed monograph query is apt to have two significant controlling functions: (1) The limits of asymmetry can be bounded more closely than they currently are; and the notion that ‘everything is asymmetric and asymmetry always exists’ can be clarified, if not removed altogether. Creating these boundaries will take the form of principles, or lasting laws that can be applied to given situations; over time; and that provide the ‘exploitable advantage’ the USA already seeks. This is the primary focus of this monograph: Are there principles of asymmetry? If so, what are they? A less definite function (2) is the Army’s acceptance to the first. This is beyond the authors’ control, but will likely include improved doctrine and infusion into the Army’s Professional Military Education (PME) system. The creation of the AWG in 2004 is likely a quick fix until the PME curriculum can be modified.

Regardless of a final and accepted solution, a key aspect to the significance and decisive nature of asymmetry is that it is a concept and not a modifier as it has become. Stated before, everything is seemingly becoming asymmetric: attack, threat, environment, weapons, methods

⁹ Elain M. Grossman, “Army To Create ‘Asymmetric Warfare Group’ To Preapre For New Threats,” *Inside the Pentagon*, 8 July 2004, 1. The AWG is a newly formed organization and details are not widely available; research indicates that the Group is primarily concerned with responses to threats to the US. The Group is reported to travel from unit to unit and instruct leaders on defeating explosive devices and enhancing force protection.

¹⁰ Andrew F. Krepinevich Jr., *The Army and Vietnam* (Baltimore, MD: John Hopkins University Press, 1989), 230-1.

etc.... (See again Table 4). Allowing asymmetry to become an adjective is akin to modifying a deliberate attack into an aggressive attack. Similar to the concept that guides a deliberate attack, the 'aggressive' factor is assumed and expected. And it is less than certain that aggression alone will win the day.

Asymmetry as a modifier also implies a sense of defeatism each time it is used in this way, and especially to identify an enemy opponent. To illustrate this one need only interpret Army doctrine, "actions to take advantage of friendly strengths and enemy vulnerabilities, and to preserve freedom of action."¹¹ If asymmetry is "dissimilarities" then the threat can and will suffer from US 'actions,' but will also capitalize on and enjoy the benefits from asymmetry. Then to say asymmetric threat--implies that the enemy is taking advantage of US 'vulnerabilities,' and that they also retain 'freedom of action.' Although this will likely be the case sometimes, it is not a conclusion for all times and all enemies. When does the threat start, and stop, becoming asymmetric? What is the dividing line between a "symmetric" means and one that is asymmetric?

A short illustration finishes this discussion and the notion that asymmetry adds anything of value as a modifier. Al Qaeda, among other similar organizations, is an undisputed US enemy. These terrorists deserve the moniker asymmetric, because doctrine is specific that "a resort to terrorism" is asymmetry. Additionally, they are dissimilar in nearly all ways: organization, doctrine, training, and etcetera. They have become the asymmetric threat mentioned earlier, but they are also terrorists. Doctrine has a concise definition for a terrorist (See Glossary). Why should soldiers, or anyone, provide this mental benefit to an enemy? Do Al Qaeda's dissimilarities, regardless of 'degree,' automatically provide them 'exploitable advantages' and 'freedom of action?' No, and therefore amending their terrorist status achieves nothing. The argument also works to address US asymmetries, although this author has yet to hear "asymmetric America." Similar and simple examples can show the absurdity of adding the

¹¹ FM 3-0, Operations, 4-31.

asymmetric bumper sticker to more pressing discourse. This assessment may be overly crude, but it again highlights the problems associated with multiple uses and meaning. At a minimum this notion is likely to confuse a soldier, which is also the focus of Chapter 2.

Why concentrate on principles and discard the notion of a definition? Colin Gray summarizes many military theorists and practitioners to answer this question, “Friction, uncertainty, the fog of war and crisis, and particularly all manner of surprises and complications triggered by the unpredictable behavior of enemies, will long continue to ensure that conduct of war is more art than science,”¹² Thus, the current definition fails to address the ‘art.’ The primary *Operations* definition used in the monograph provides a lot of scientific description, but leaves all of the art to the soldier. This is likely the evolution asymmetry in US military operations and doctrine should take:

Very few military concepts are created in full form or fully realized in their first incarnations. Like most ideas, military concepts tend to form iteratively and incrementally over time. This is not criticism of concept developers, but simply a reflection of the limits of human foresight. This is the nature of concept development. It is not an orderly, sequential process. Concepts are not engineered solutions.¹³

Asymmetry today is found at the functional and even enabling concept level. It should be at the capstone operating level, “in broad terms the way military art and science is applied across the fullest possible range of military operations.”¹⁴ The three-tier application of John Schmitt’s “operating concepts” provides an effective way to “describe how military forces operate.”¹⁵ This is not to be confused with the levels of war, but parallels are certain to exist. Most notably is the overlap between levels; when do particular tasks start and stop becoming enabling, and start and stop becoming functional? There are no lines of demarcation. Rather, it requires a total

¹² Colin S. Gray, *The Sheriff: America’s Defense of the New World Order* (Lexington: The University Press of Kentucky, 2004), 28.

¹³ Office of the Secretary of Defense: John F. Schmitt, *A Practical Guide for Developing and Writing Military Concepts* (Defense Adaptive Red Team Working Paper [DART] #02-4: Hicks and Associates Incorporated, December 2002), 22.

¹⁴ *Ibid.*, 8.

¹⁵ *Ibid.*, 7-11.

understanding of the three levels and their relationship to one another. In a perfect world they are nested in all ways, but because this is rarely (if ever) the case, a driving force sets the pace. This umbrella is the notion of a capstone-operating concept, which is similar to the military's keystone doctrinal manuals.

There is nothing new about this approach. Besides the popular and lasting nine principles of war, the military has principles of intelligence; command and control; logistics; and nuclear, biological, and chemical defense. There are likely more. Therefore it is prudent to put the horse back in front of the cart to appreciate asymmetry. Similar to the ill-fated Marines amphibious-warfare exercises at Culebra in 1921; current mistakes should not mean abandonment and certainly not complacency.

Methodology

The only way to study the laws governing a war situation as a whole is to do some hard thinking.¹⁶

Mao Tse-Tung, *Problems of Strategy*

The most logical approach to develop this monograph is best described as deductive in today's terms, but it has relations to Mao Tse-Tung's recommended format of 70 years ago. Some inductive reasoning also serves to reach this normative goal. The introduction incorporates prior research from this author to validate the problem statement(s) and set the stage for the analysis in Chapter 3. An expanded literature review from this work will examine recently introduced definitions of asymmetry from a variety of sources: joint and Army doctrinal publications, professional military studies and related works from civilian authors. An infusion of classical military theorists will serve to assist the monograph as required. The review will further clarify the problem to the reader, and more importantly form the basis to describe the characteristics--then principles of asymmetry. As argued earlier, one particular aspect of

¹⁶ Mao Tse-Tung, Strategy in China's Revolutionary War (written by Mao, 1936), reprinted in US Army Command and General Staff College, A699: Selected Military Writings of Mao Tse-Tung (Fort Leavenworth: USACGSC, no date), 83.

asymmetry is removed from the conclusion early--asymmetric, or using the term as a modifier. The delimitation is not only accurate, but reduces the monograph to a manageable scale. Brevity defends this decision.

Chapter 2, “Problem Illuminated” is included as a review from the author’s previous work and more importantly serves as a bridge. The content spans Army doctrine, soldier’s appreciation for asymmetry and introduces the reader to prevailing characteristics of asymmetry. The final distance is filled in Chapter 3.

The analysis of the aforementioned will serve to add boundaries to the asymmetry concept by: accepting some characteristics, because no other source addresses them; rejecting others based on existing and accepted doctrine; and clarifying within limits and through discussion still more (e.g.... the unsettled argument over asymmetry and the levels of war). In essence, this procedure will deconstruct the complexity of the concept.

The foundation for the analysis is current Army doctrine; specifically the full definition as found in FM 3-0, *Operations* (See Appendix C). This not only adds validity to the work, but it is consistent with current PME and soldier appreciation levels (See Chapter 2). An assumption is therefore that Army doctrine is enough of a “guide” to expand from.¹⁷ The next section realizes often-divergent doctrine, but the author determines that the *Operations*’ definition best encompasses these many characteristics. In essence, it is the best place to start. Still, the US Army does not have monopoly of good ideas. The introduction of sister service manuals, joint publications and professional works by subject matter experts (SME) promotes not only a wider view, but also accepts that asymmetry is a larger part in the conduct of war and conflict.¹⁸

¹⁷ Joint Chief of Staff, Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms (Washington D.C.: US Government Printing Office, 2001 [amended June 2004]), 165.

¹⁸ Throughout the remainder of the monograph, ‘war and conflict’ are used interchangeably without effort to delineate between the two. This adds to the larger scale that asymmetry plays on the entire spectrum of fighting, across history, and into the future.

Army Doctrine

A review of Army doctrine must be preceded by joint doctrine. Joint documents serve as the “fundamental principles that guide the employment of forces of two or more services in coordinated action toward a common objective.”¹⁹ No reference is required to illuminate that the Army will fight jointly in the future; the same holds true for all of the services. Unfortunately, joint publications do very little to address ‘common’ and asymmetry.

Joint publication (JP) 1-02, Department of Defense (DOD) *Dictionary of Military and Associated Terms* does not include asymmetry.²⁰ It does include “asymmetric sweep,” but this has everything to do with maritime mine clearing. Perhaps this is a positive sign and service members should infer that asymmetry is a concept and not a term? This is doubtful based on other publications that do use and attempt to define the term; the result is confusion and divergence in appreciation.

Joint Publication 3-07, the *Joint Doctrine Encyclopedia* precedes JP 1-02 by six years and takes liberty to instruct joint forces commanders (JFC) to use US asymmetries in a clearly offensive way. The example provided includes air attacks on ground formations in convoy.²¹ Yet JP 1-0, *Joint Warfare of the Armed Forces of the United States* published in 2000, approaches asymmetry from a plainly threat-based way, “states or non-state groups - to seek to exploit asymmetries and focus on US vulnerabilities”.²² The contrast is apparent and made worse by Joint Vision (JV) 2020 that references asymmetry as it applies to: approaches, methods, advantages, concepts, threats and engagements.²³ More discouraging than the absence of a

¹⁹ Joint Chief of Staff, J-7, Joint Electronic Library (Washington D.C.: Available from CD-ROM, June, 2003).

²⁰ Curiously enough, JP 1-02 does not include “war” either.

²¹ Joint Chief of Staff, Joint Publication 3-07, Joint Doctrine Encyclopedia (Washington D.C.: US Government Printing Office, 1997), 713.

²² Joint Chief of Staff, Joint Publication 1-0, Joint Warfare of the Armed Forces of the United States (Washington D.C.: US Government Printing Office, 2000), II-3.

²³ Joint Chief of Staff (Chairman, Shelton, Henry H.), Joint Vision 2020 (Washington, D.C.: US Government Printing Office, 2000).

definition in JV 2020, is the fact that the 2003 Joint Electronic Library (JEL) CD-ROM contains 438 asymmetric occurrences of contradictory use, definition and spin. Joint Publication 3-0, *Doctrine for Joint Operations* provides the defense to this assertion when it defines the “asymmetric environment” as the exclusion of “conventional force-on-force operations.”²⁴ The publications explanation of “asymmetric actions” is less descriptive, but is in line with JP 3-07. Joint publications, although attempting, fail to wholly capture the difficult concept of asymmetry.

The trend in joint documents is on one hand divergent, but on the other narrowing. The sloth-like timeline for publication is partly to blame--divergence, because old doctrine says one thing, while newer doctrine says another. But as revised documents reach the force the idea behind one definition is emerging. An example of this is found in JP 1-0. Asymmetry is “A timeless fundamental principle of the profession of arms”.²⁵ This characteristic and others help to define the monograph and are addressed farther in Chapter 3. In keeping with trends, the force will continue to train jointly and fight as part of a coalition. This is a consideration that must be addressed and the US’s closest allies generally accept asymmetry as threat-based.²⁶

The Army will fight jointly so it is worth mentioning where the other services align themselves with asymmetry and doctrine. The Navy is the anomaly compared to joint and other services--they do not attempt to define asymmetry in their major publications. Although many of the same characteristics and descriptive terms are used, the word asymmetry is void from Naval Warfare Publications (NWP) reviewed in the author’s *Myth* study.²⁷ The Air Force uses asymmetry most often, but this is due largely to the nature of flight. Asymmetry is regularly used in its English form to define ‘unbalanced’ in fuel, weapon and cargo configurations; surely important to flight. The remainder is similar to joint publications, but breaks stride concerning

²⁴ Joint Chief of Staff, *Joint Publication 3-0, Doctrine for Joint Operations* (Washington D.C.: US Government Printing Office: 2001), II-1.

²⁵ *Ibid.*, II-3.

²⁶ ABCA. *Coalition Operations Handbook* [On-line] Available from: www.abca.hqda.pentagon.mil, 2001, 21-1.

²⁷ ‘*Myth*’ is an abbreviation for the study, *Asymmetric: Myth in United States Military Doctrine*.

“Parallel Operations.” The idea of ‘parallel’ is closely inline with asymmetry. The Air Force’s doctrine contrasts this against their “serial operations,” or what the reader can consider symmetrical (if this determination can be made). Serial is simply air-to-air combat, while parallel attacks are more than likely on: command and control facilities, critical infrastructure and other centers of gravity.²⁸

The Marines, unlike their Navy brothers and closer in nature and word to Army doctrine, have shifted their definition and use over time. The shift has brought the Marines close to joint documents in many ways, but this service remains forward thinking. In 2001 Marine Corps Doctrine Publication (MCDP) 1-0, *Marine Corps Operations* added asymmetry to their “Tactical Tenets:” tempo, surprise and adapting. Asymmetry to a Marine “means gaining advantage through imbalance, [and] applying strengths against and an enemy’s weakness in an unexpected way.”²⁹ While the Marines likely suffer from the same time lag as other doctrine, it would be unfortunate to lose the 1997 MCDP 1-1, *Strategy*’s insight. The publication states that “An asymmetric strategy is one that attempts to apply one category of means against another category, to use some means to which the enemy cannot effectively respond in kind.”³⁰ The notion is a deep one and is helpful later in the monograph. Unfortunately a new version of this publication is expected to mirror joint publications.

Army doctrine has taken the lead in asymmetry beyond its service peers and joint masters. Similar to the Marines, the Army elevated asymmetry to a place of considerable importance. The “Fundamentals of Full Spectrum Operations” now includes asymmetry. The concept accompanies other critical functions under “Army Capabilities.” These include: complementary and reinforcing effects, task organization, combined arms, and command-support

²⁸ Secretary of the Air Force. *Air Force Doctrine Document 2, Employment of Aerospace Power* (Washington, DC: Secretary of the Air Force, 2000), 7-8.

²⁹ Secretary of the Navy. *Marine Corps Doctrinal Publication 1-0, Marine Corps Operations* (Washington D.C.: Secretary of the Navy, 2001), 6-38.

³⁰ Secretary of the Navy. *Marine Corps Doctrinal Publication 1-1, Strategy* (Washington D.C.: Secretary of the Navy, 1997), 66.

relationships.³¹ The placement of asymmetry here is curious, but beyond the scope of this study to resolve. Even so, the definition that opened this monograph remains a decent attempt to capture the prevailing thoughts on asymmetry.³² It provides fertile ground for discussion in Chapter 3.

Asymmetry is not found in the majority of Army manuals, but it is found with more frequency, especially among more recent publications. The most recent is the September 2004 FM 1-02 (formerly FM 101-5-1), *Operational Terms and Graphics*. This definition is wholly in line with FM 3-0, if not exactly the same, minus some examples and descriptions. It even references FM 3-0. The 2001 Field Manual 3-90, *Tactics* also references *Operations* and asymmetry on six occasions. Yet this publication, whose purpose “focuses on the tactics used to employ available means to win in combat,”³³ never attempts to further define asymmetry in the context that it is used.³⁴ The same purpose admits that *Tactics* is not understood in a vacuum, and that an appreciation of operational art, the principles of war, and the link between the levels of wars is required. Is this an indication that asymmetry is not present at the tactical level of war? Asymmetry is not found in this manual’s index or glossary either.

Two additional FM’s use *Operations*’ base definition and add to it. Field manual 3-06, *Urban Operations* and FM 3-21.31, *The Stryker Brigade Combat Team* were published in mid-2003. Each source regards asymmetry as threat-based and gives little attention to US asymmetry and increased probability of success. *Urban Operations* begins its definition with, “An emphasis on asymmetric means to offset United States (US) military capability has emerged as a significant trend among potential threats and become an integral part of the threat principles and tactics

³¹ FM 3-0, *Operations*, 4-27--4-32.

³² The complete reference from this publication is found Appendix C.

³³ Department of the Army, *Field Manual 3-90, Tactics* (Washington D.C.: US Government Printing Office, 2001), xiii.

³⁴ ‘Used,’ meaning the manual uses it as a modifier, asymmetric(al): effects, manner, ways, weapons.

discussed below.”³⁵ Admittedly this definition is found in the “Urban Threat” chapter, but strangely nowhere else. An odd juxtaposition is that our enemy may be already using asymmetry with principles?

Field Manual 3-21.31 (*The Stryker Brigade Combat Team*, or SBCT), in its “Urban Operations” chapter refers to asymmetry almost as a side-note, “Trends indicate an increasing availability and integration of more sophisticated technology and unorthodox operational approaches (asymmetry) by potential adversaries focused on the diversity and time sensitivity of humanitarian issues.” Yet the publication goes on to offer our enemy with more “principles to oppose US forces” in built-up areas: opposed entry into theater; neutralize technological overmatch; control the tempo; change the nature of the conflict; cause politically unacceptable casualties; allow no sanctuary; and conduct dispersed and decentralized operations.³⁶

Interestingly enough, this is decent advice and largely in-line with chapter 3.

Two points of analysis are drawn from this manual and FM 3-06. First, doctrine indicates that asymmetry is enemy-based and more prevalent in urban terrain (or this terrain somehow causes asymmetry, which is not the case). Second is the notion that ‘principles’ can somehow better translate a tough idea to soldiers. This is refreshing! In contrast to *Tactics* non-use of asymmetry, the SBCT manual is very clear that it focuses on tactical level operations. This publication also uses these characteristics to stimulate the cognitive (see Chapter 3): offsetting weakness, seeking advantage (via urban settings), dispersed and decentralized, and adapting tactics.

This chapter provided a lot of information in a short space. It is the simplest beginning to a complex and grand concept. The roots of the problem (and some solutions) follow this formality and assist the reader by providing some width and depth to the discussion in Chapter 3 and 4. The

³⁵ Department of the Army, Field Manual 3-06, Urban Operations (Washington D.C.: US Government Printing Office, 2003), 3-2.

³⁶ Department of the Army, Field Manual 3-21.31, The Stryker Brigade Combat Team (Washington D.C.: US Government Printing Office, 2003), 6-5.

following chapter is also important, because it establishes validity for the final conclusions. The author recommends a review of Tables 1, 2 and 3 now. This makes reading easier in Chapter 2.

CHAPTER 2

PROBLEM ILLUMINATED

The past is an uncertain guide to the future, but it is the only one we have.¹

Max Boot, *The Savage Wars of Peace*

The study *Asymmetric: Myth in United States Military Doctrine* asks the primary question, “Do service members appreciate asymmetry?”² This work analyzed this question (and others) from a joint or all-services (US Army, Navy, Air Force, and Marines) perspective and included rank from captain to colonel. The eventual conclusions are largely based on a survey (See Appendix A) and a review of service and joint doctrine, as well as contemporary professional authors. The results are jointly aggregated to meet this author’s ‘United States Military’ constraint. Yet the demographic information collected allows this data to be used in this monograph, because Army specific results are still available. The Army results mirror and even enhance the conclusions from this study: Soldiers do not appreciate asymmetry in accordance with doctrine. This is not necessarily a bad condition. The preceding chapter makes clear that current doctrine on asymmetry is hopelessly confusing. A final conclusion from the *Myth* study is that there is correlation between soldier appreciation and the doctrine used to obtain it.

This chapter outlines the doctrinal and survey results generated from the previous study. *Asymmetric: Myth in United States Military Doctrine* is a year old-plus at the time of this research. As such, some new information and analysis is provided. This allows new insight on the same conclusions reached earlier. The survey data and analysis is modified to reflect only Army responses, while the doctrinal review noted earlier incorporates both joint publications and

¹ Max Boot, *The Savage Wars of Peace: Small Wars and the Rise of American Power* (New York: Basic Books, 2002), 336.

² Unless otherwise referenced, the information in this chapter is derived or directly sourced from *Asymmetric: Myth in United States Military Doctrine* (See References Used).

(mostly) Army field manuals for the obvious reasons associated with doctrinal development. A proposed definition of asymmetry is offered in the last study and serves as the foundation for thought in Chapter 3 (See Appendix B, or “Military Asymmetry”). The definition served to encompass many aspects of the original study and is not an answer to this monograph.

A point of common contention requires clarification for the survey results that follow and the nature of this work. The term ‘appreciate’ was chosen for the *Myth* study to capture the value that soldier’s place on asymmetry. The term addresses the affective learning domain and the generally accepted nature of learning. Although this term is best suited for the previous study, it carries a negative or less-than-concrete definition that creates two problems: There is less recognition of the results by soldiers; and it fails to definitively capture what this monograph seeks. This work expands beyond the affective and into the cognitive domain: synthesis, application, knowledge and comprehension. A recent Defense Science Board concluded, “the nature of future conflicts... will require continuous high cognitive proficiency from our warriors.”³ A mental distinction between the previous study, its results and this monograph is required.

A series of sources indicate that to ‘appreciate’ one must recognize the quality, significance or magnitude of something; that they are fully aware or sensitive to it. Put another way, it is difficult to closely associate a value to something that is less than concrete or disputably measured. Conversely, the cognitive domain seeks an objective based on comprehension: facts and principles, future consequences, methods and procedures. This best suits the needs of this monograph. Therefore, although the survey results from the past study measure the affective domain, the resulting data creates a bridge to the more quantitative field--cognitive. It is in this domain that we can expect to clarify asymmetry with principles first, and then increase appreciation of it in the future.

³ Office of the Secretary of Defense for Acquisition, Technology and Logistics, “Training for Future Conflicts” (Washington, DC: Defense Science Board, 2003): 80.

Army Statistics

Asymmetry is a term used without being understood. I was an [observer controller] at the [Army’s] National Training Center and we used to hear units talking about asymmetric tactical and support operations without really knowing what it meant. Hell, I don’t even know what it means. I think what everybody thinks it means is non-linear and non-contiguous. Is that what it means? I still don’t really know.⁴

Army Major, Survey Comment

This soldier is not alone. The conclusions from *Asymmetric: Myth in United States Military Doctrine* echo an Army struggling with asymmetry, its doctrine for it, and the associated appreciation level one would expect. The doctrinal struggle is introduced in Chapter 1. The appreciation level is summarized by several key Army statistics from the study. The author apologizes for the effort to balance brevity and validity of these statistics.

The most telling information for the purposes of this monograph is derived from a comparison of three questions: Self-appreciation of leadership;⁵ self-appreciation of asymmetry; and peer appreciation of the same.

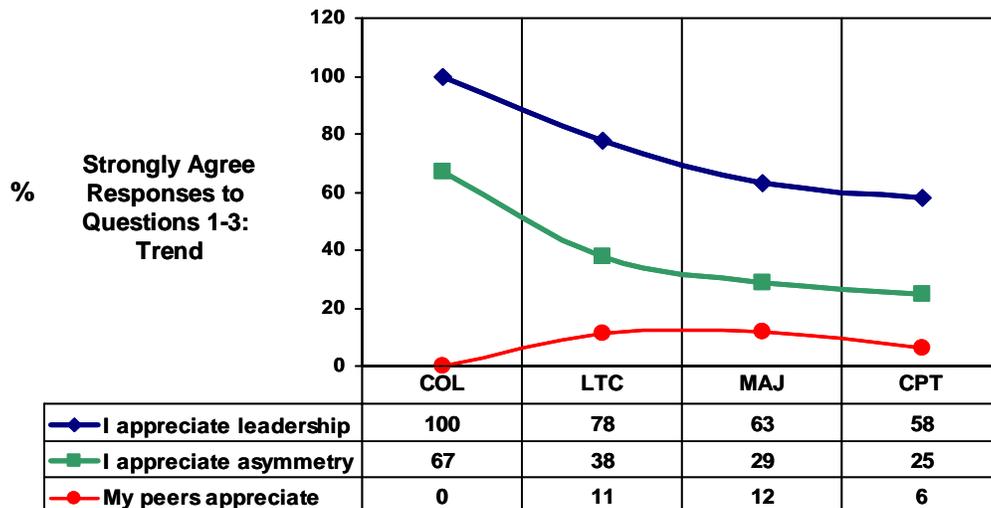


Figure 1. Trend in Appreciation Level by Rank

⁴ Pomper, “Asymmetric: Myth in United States Military Doctrine,” 53.

⁵ This question was used as a mental benchmark for the respondent; it gives them something to contrast asymmetry to, and is arguably as difficult--if not more complex than asymmetry.

Figure 1 illuminates the down-trend. The most noteworthy aspect of this tendency is not the decrease from an appreciation of leadership, to self-appreciation of asymmetry, to peer appreciation; rather it is the steady reduction by rank. The conclusion is therefore that rank plays some role in the appreciation level. The *Myth* study hypothesized that this is largely due to more experience, or a greater comfort level and confidence in ones ability. The notion of experience and perception is discussed in Chapter 3 and should not be lost by the reader. There is also data that supports a greater reliance on doctrine as rank increases (see Table 1⁶). This may be a “Catch-22” of sorts based on the divergent nature of the doctrine. Statistics support that while 43 percent of respondents think that asymmetric is used in accordance with doctrinal sources, 27 percent do not; and a surprising 29 percent cannot be sure (a total of 56%). A cause for these conflicting results is surely the doctrine itself, but is likely influenced by the aggregate results shown below in Figure 2. It begs the question: How can you determine the appropriate use of asymmetry if you do not use doctrine? The answer is rooted in the question posed prior, because it allows the soldier to also draw on education and experiences, in contrast to doctrine.

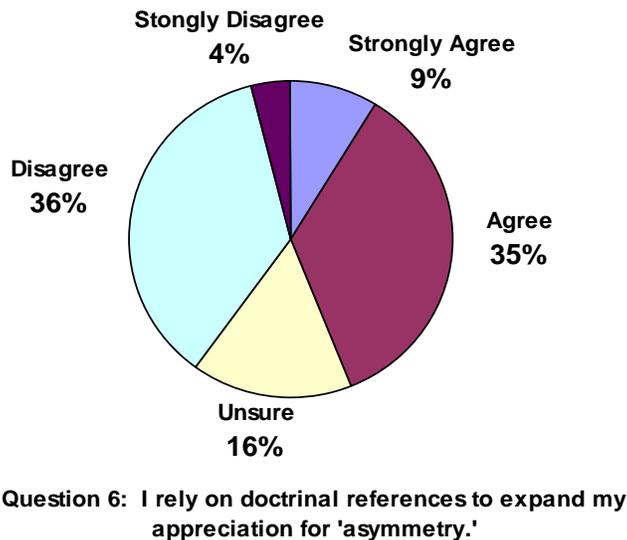


Figure 2. Reliance on Doctrine for Asymmetry

⁶ Specifically, 'I rely on doctrinal references to expand my appreciation for asymmetry.'

Two other measures (or questions) support a fleeting appreciation for asymmetry. One asks if asymmetry is ‘overused in military jargon and professional discussions.’ The result is predictable; 55 percent believe it is overused, while only 21 percent are comfortable hearing it (See Table 1). Another measure pits the respondent’s knowledge of doctrine, a common military operation, and asymmetry. The question posed is, ‘Fixed-wing close air support (CAS) should be considered an asymmetric attack [?]’ Army doctrine would indicate that this is asymmetric. Yet 55 percent of soldiers do not agree, and believe that it is not an asymmetric attack. Perhaps this is because ‘CAS’ is an already accepted and understood military operation? The answer is beyond the study, but does illuminate the idea that using asymmetric to modify an event or thing creates confusion. The same question measured unsure responses at 23 percent. The Army cannot afford to have 78 percent of its soldiers disagreeing with doctrine or, by-and-large uncertain when it involves success in the battlespace.

Two final questions in the survey move beyond the measures used in the *Myth* study to determine appreciation. Nonetheless, they solidify the conclusion of the study and add to this monograph. Table 3 and table 4 at the end of the monograph provide a detailed by-rank data spread. Although the respondent was constrained by the choices provided, the aggregate results in Figure 3 stand-alone.

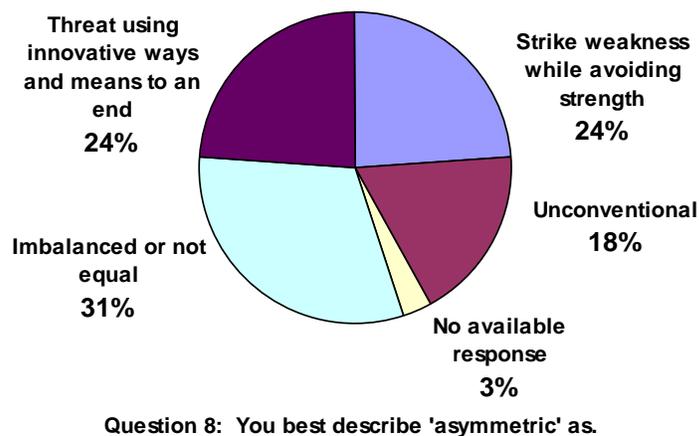
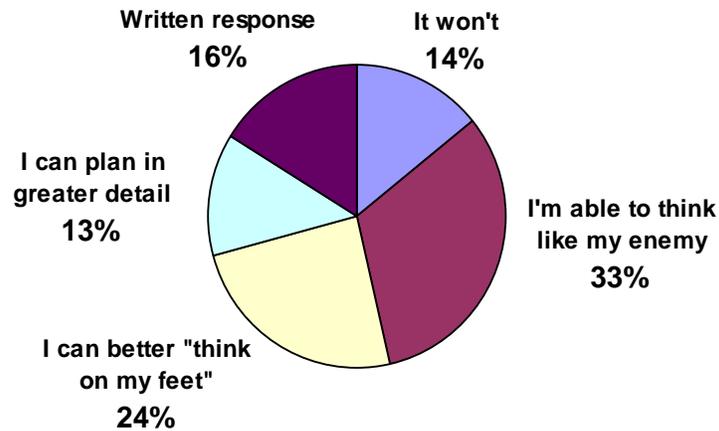


Figure 3. What Soldiers Think Asymmetric Is



Question 9: How will your appreciation of 'asymmetry' translate into military success.

Figure 4. Asymmetry and Military Success

The aggregate data above (Figure 4) is not only interesting, but an argument can be made that each response is correct. The 16 percent of respondents that had something different to add were generally hostile to the notion that asymmetry and military success were one (The feeling was strong enough that it was not enough to simply check 'It won't'). Some respondents combined the predetermined selections; while others became creative. A sense of these broadens the coming analysis: "able to appreciate complex factors, not necessarily military in nature;" "guard against more possibilities;" "determine enemy COAs;" "allows efficient and effective offensive operations;" "I [can] better recognize my vulnerabilities;" "enable[s] better war gaming during MDMP;" "[it helps] properly employ our vast array of weapon systems." The author is not in position to disagree with any of these interpretations, while even the more flippant commentary warrant some attention, "it isn't always mano a mano in the COE; sometimes the little guy comes out of a closet and kicks the crap out of a big guy."⁷ This respondent's style is questionable, but his point is made clearly.

⁷ These survey response comments are extracted from 2003 data and were not used during the previous study. They will remain with the author's personal records for one year.

One particular contrast from Figure 4 (Asymmetry and Military Success) highlights rank specific circumstances (See Table 4).⁸ Captains appear confident that asymmetry is likely to translate into military success, because only four (4) percent responded ‘It won’t.’ The remaining and majority of captains use asymmetry to think like their enemy (43%). Curiously their field-grade leadership is less confident, especially among lieutenant colonels (LTC). Thirty two (32) percent of LTCs believe that asymmetry will not translate into military success. This is also the majority response from LTCs to this question (and by a 6-point margin). Majors were not far behind their LTC peers (25%), but the majority of these field-grade officers will think well on their feet (30%) in the face of difficulty. The disparity is an unsettling fact.

The *Myth* study makes other conclusions and several recommendations in relation to the US military’s’ appreciation of asymmetry and the survey results. The Army data mirrors the aggregate findings and justifies replacing service member with soldier, and US doctrine with Army doctrine. There is correlation between Army doctrine and a soldier’s appreciation level of asymmetry. The result from both is poor. As such, asymmetry should be presented as a concept versus a modifier, and standardized across new manuals. Asymmetry will remain in Army jargon and doctrine regardless of appreciation level or clarification, and for many years. A recommendation is that clarification should take place over scores of pages and not mere sentences. This is partially the motivation for this monograph.

A new and far reaching conclusion from this data ends this chapter. The author admits that it is not bulletproof, but fair enough given the doctrine and the obvious difficult nature of asymmetry. Fact: Analysis shows greater appreciation of asymmetry as rank increases. Another fact: The last data and analysis from Figure and Table 4 show an inverse relationship to the first fact cited. Closure on this section and chapter poses that the more soldiers appreciate asymmetry given today’s doctrinal sources, the less “significant, [and] perhaps decisive” asymmetry

⁸ Colonels are omitted from the analysis by design; a lack of responses to this question by this demographic questions validity.

becomes.⁹ This is not necessarily a bad circumstance. Chapter 4 and Figure 7 address the true positive effect of an appreciation of asymmetry.

It may be beneficial to quickly review appendices B, C, D and the glossary at this point. The following chapter is admittedly difficult to grasp based on the nature and complexity of the narrowing question at hand: What are the principles of asymmetry?

⁹ FM 3-0, Operations, 4-31.

CHAPTER 3

PRINCIPLES OF ASYMMETRY

The answers exist; we can master the asymmetric domain, but only if there is a willingness to embrace its complexities, legitimize its existence, and use the brute force brainpower that exists within to adapt our capabilities to the realities of conflict in the 21st century.¹

Melissa Applegate, *Preparing for Asymmetry*

If appreciation of current doctrine results in a limiting effect on the battlefield it must be changed. Asymmetry meets Ms. Applegate's assertion and echoes the classical need for "military genius" that provides "a harmonious combination of elements, in which one or the other ability may predominate, but none may be in conflict with the rest."² This chapter wrestles with a particular problem of today: Asymmetry. The remaining subsections define what asymmetry is not, and then what it likely is. The base of this analysis is the definition found in Army FM, *Operations*. Other sources provide width and depth to the analysis: Marine and sister-service manuals; other recent Army doctrine; and professional works from military and civilian authors--past and present.

What Asymmetry is Not

Chapter 1 already establishes that asymmetry is not an adjective. It modifies nothing by itself and is proven to increase an 'unsure' prevalence in the Army officer corps. Even if one were to try to compare the Army's definition to say an "asymmetric threat," the discussion would twist and turn and the result would be similar to a classic and militarily accepted threat estimate.³ This is, as it should be: Here is the enemy and this is what we know: numbers, locations, recent activities, known capabilities and etcetera. To this end, asymmetry is also not "a resort to

¹ Melissa Applegate, *Preparing for Asymmetry: As Seen Through the Lens of Joint Vision 2020* (Carlisle, PA: US Army War College, Strategic Studies Institute: 2001), 25.

² Carl Von Clausewitz, *On War*, ed., and trans. Michael Howard and Peter Paret (New York, NY: Alfred A. Knopf: Random House Inc., 1993), 115.

³ A refreshing and worthy perspective is offered by Dr. Stephen Blank: *Rethinking Asymmetric Threats*.

terrorism and rejection of more conventional rules of engagements are the norm.”⁴ Again the introduction provides the analysis and conclusion. The Army already has unambiguous doctrine for the terms ‘terrorism’ and ‘unconventional.’ *Operations* play on words and redundancy, “rejection of more conventional” does not fool or help anyone.

The respected author Colin Gray argues that asymmetry simply “means different” and is “essentially... a hollow concept”⁵ He is partly correct, because in its current state asymmetry might as well be ‘hollow.’ The conditions in conflict are too complex and dynamic to rely on differences alone. These are likely important, if not critical, but the Army’s needs exceed this. The reality is that more than differences are at play in decisive victory. Therefore asymmetry cannot come to mean simply and solely different. *Operations*’ capitalizes on this notion and is the core of the documents’ definition. The FM exhausts the synonyms for different: dissimilarity, differing, comparative, relative, degree and of course different. No scientific study is required to conclude that differences have always, will always and do exist in all things war. And like the discussion “what is war,” the “what is different” debate is long and based greatly on experience and education. This author calls it perception.

The *Myth* study examines perceptions and asymmetry. Given the results from Figures 3 and 4, perception will always prevent a concrete or measurable scale. Judging ‘dissimilarities’ is based on a soldier’s experience, education, and the common and obvious reality of a situation. Yet even ‘reality’ is skewed in the wake of innovation; when the ‘common’ plane is paired to the ‘obvious’ ship. *Operations* is accurate in that “asymmetry concerns dissimilarities.” It does not say that asymmetry is different, but the constant reference to it is likely to bend soldiers (on the order of 31%) to that characteristic. Admittedly, the English use of the term is also prone to prejudice inexperience and junior-educated troops. Even senior leaders are susceptible, because “an open mind is the qualification for creative problem solving, but at the same time an open

⁴ FM 3-0, *Operations*, 4-31.

⁵ Colin S. Gray, “Thinking Asymmetrically in Times of Terror,” *Parameters*, spring 2002, 13-14.

mind is vulnerable to external interference.”⁶ Therefore dissimilarities, or things that differ are not able to be principles of asymmetry, but the ‘concerns’ of these will add to the discussion of what are the principles.

Asymmetry is not an adjective, it is not terrorism, nor unconventional, and it is not simply differences. There are several other characteristics that pervade doctrine and works that are discounted, but developed in the next section. Another characteristic is not the reverse of, or opposite to symmetrical, although US doctrine is quick to contrast the two in an attempt to clarify asymmetry: As if a lack of the principles of war would somehow equate to peace. This characteristic is too elementary to address the complexity of conflict. Although “draws” do occur on the battlefield and in war, the argument is mute because of perceptions mentioned earlier. There is no concrete way to define the many ‘differences’ and no way to calculate an even (or same, or balanced) event. A hypothetical situation pits two warriors equal in all ways--identical twins, on flat ground and in still air. In a fight to the death, one can walk away alive or victorious. This is a scenario of asymmetry in execution.

What Asymmetry Is

The principles of asymmetry require a pretext, or introduction and this is similar to other Army principles. The format for this is inspired by John F. Schmitt’s ideas that a valid operating concept should have: purpose, time horizon, assumptions, risks and a description of the military problem.⁷ There are others, but beyond the scope of this monograph. The author draws on his own work to assist this monograph (See Appendix B), while *Operations*’ appears to use a similar approach. The principles and their discussion follow the proposed preamble:

⁶ Henrik Friman, “Perception Warfare: A Perspective for the Future,” The Swedish National Defense College: Department of Operational Studies, no date, 7.

⁷ DART, 15-19.

Asymmetry increases the likelihood that one opponent will achieve some level of success over others. This is sometimes significant and decisive, and not always in a purely military context. Asymmetry also provides combatants at all levels with a non-prescriptive set of principles to: tip a balance, exploit a condition; or create and prevent a surprise. It is not a guarantee for success, but rather an aid and is used in conjunction with: leadership, other principles, doctrine, equipment, values, experience and organizations. The concept is timeless and is addressed by all military theorists and in as many ways. Therefore, asymmetry endures to this day.

Asymmetry endures, but the nature of it evolves with the security environment. New equipment, organizations, means and values, to name only some, create innovative circumstances or conditions that are unknown based on current doctrine and experiences. This mix of innovation is not necessarily new in the time sense, but rather is the combination of existing conditions and their relations. This has a profound and previously unknown impact. The United States and its allies use asymmetry to win engagements, battles, and wars. As such, our opponents have the same opportunity. Appreciation for the concept and the principles that give it foundation increase the probability of success at the strategic, operational and tactical levels of war.

It should come as no surprise that a principle of asymmetry shares characteristics of other military concepts and ideas. “Surprise therefore” is a principle for asymmetry, and “becomes the means to gain superiority.”⁸ It is nonetheless, modified within the limits of its conventional appreciation and application. Countless military sources generally regard this principle of war as the ‘ability to strike an enemy at a time and place, or in manner for which the enemy is unprepared.’ This also allows asymmetry to nest neatly with current doctrine, because surprise is also a characteristic of offensive operations. This allows asymmetry to support one of the four legs of full spectrum operations (FSO)--offense. Still, the new principle requires more resolution to marry with asymmetry.

The *Myth* study supports the principle of surprise claim. Thirty two percent (32%), and the majority of Army officers, felt that an appreciation of asymmetry would allow them to think like their enemy. *Operations*’ requires leaders to “estimate the enemy commander’s intent” to achieve a “sudden, violent, and unanticipated... paralyzing effect”⁹, or surprise. The essential aspect of this characteristic of offense is to ‘estimate’ and create ‘effect.’ Estimating is synonymous with recognition and goes far beyond the ‘commander’s intent’ in achieving

⁸ Carl Von Clausewitz, *On War*, 233.

⁹ FM 3-0, Operations, 7-4.

asymmetry. Recognition of conditions in war is essential, because “many calculations lead to victory, and few calculations to defeat.”¹⁰ The conditions are numerous and are likely what *Operations*’ attempts to capture in its definition of asymmetry: ‘organization, equipment, doctrine, capability, and values.’ It is not then the simple dissimilarity of these conditions, but rather the cognition by one side of the effect the condition will have. This also allows asymmetry to be just as effective in the defense as it can be in the offense. The defense leg of FSO is steady.

Conditions then are physical, psychological, numeric, environmental, perceived and actual objects that affect tactics, operations and strategy in conflict. There are certainly more conditions or objects that pervade battlefields of today and of tomorrow: sound and light spectrums, ideological spirit or will, and time (specifically addressed latter in this chapter). These conditions undoubtedly reside at all levels of war when their effect is estimated, adapted and eventually felt by the soldier, leader, formation, group, or country. This final feeling or effect produces an advantage on one side and a disadvantage on the other. The view of duality permeates the remaining principles of asymmetry; as does the notion that many agents act at once--or are complex. As such, stability and support operations (or sometimes called SOSO) are also complex by nature, and attempt to “influence” and “prepare for or respond”¹¹ to conditions. Therefore asymmetry is safely and surely found in these operations. Support for the principle in SOSO is also found in accepted theory, “We suggest that surprise lies at the root of all operations without exception.”¹²

In fairness to the *Myth* thesis and the reader, only three percent (3%, see Figure 3) of respondents choose ‘no available response for an action’ to the question, ‘you best describe asymmetry.’ The idea of being ‘unprepared’ was the original intent, but was obviously lost in the

¹⁰ Sun Tzu, *The Art of War*, 1910 trans., Lionel Giles, (Gainesville, FL: InstaBook Corporation, 1998), 14.

¹¹ FM 3-0, Operations, 1-56--16.

¹² Carl Von Clausewitz, *On War*, 233.

survey's translation. The small percentage suggests that the question is bunk. The final definition as a principle of asymmetry is:

Surprise. The ability or inability to anticipate conditions in conflict will add to asymmetry. Conditions are numerous and are not limited to physical, psychological, numeric, environmental, perceived and actual objects that affect tactics, operations and strategy. Cognition in relation to friendly, enemy, and countless conditions, whether planned or realized, allows this principle to gain or lose a position of advantage. The effect of these conditions exploits the failure of a side to recognize or anticipate. "If you know neither the enemy nor yourself, you will succumb in every battle."¹³

The next principle has to do with time. The notion of time and conflict share an important characteristic; they are both constant. Regardless of physics lessons and a theoretical discussion of war, time to the combatant is always in play and there is usually not enough of it. In contrast, there is often too much, "that's too far in the future to worry about." Both of these situations add to asymmetry in conflict. Steven Metz and Douglas Johnson realized the importance of time in their 2001 proposal of "Strategic Asymmetry," but their argument is limited to simple "short-term" and "long-term" effects of advantage.¹⁴ In other words, some advantages last longer than others. This is perhaps due to the limiting nature of asymmetry at the strategic level of war only?

Field Manual 3-0, a publication that "provides operational guidance for commanders... to other operational-level organizations"¹⁵ also recognizes the relationship between asymmetry and time, because "asymmetry tends to decay over time as adversaries adapt."¹⁶ The level of war at which asymmetry resides is promptly put into question in the past several sentences. The answer to this question is in line with the principle--time. Because time is an agent acting at all levels of war, then asymmetry is sure to follow at each step. The argument becomes more complex when a detailed investigation of the effects of time is compared by level of war. A super-complex

¹³ Ibid., 24.

¹⁴ Steven Metz and Douglas V. Johnson II, *Asymmetry and U.S. Military Strategy: Definition, Background, and Strategic Concepts* (Carlisle, PA: US Army War College. Strategic Studies Institute, 2001), 6-7.

¹⁵ *FM 3-0, Operations*, vii.

¹⁶ Ibid., 4-31.

condition is created when levels of war overlap, or transition from one spectrum of conflict to another (or others)--et al. The importance of an overlap and seam is discussed in Chapter 4.

Doctrine and military operations are no strangers to time. The common heard mission-enemy-terrain-troops-time, or METT-T¹⁷ acronym blanket discussions in tactics, operations and to a lesser extent, strategy. Similar to the other letters, military theorists and cadets alike are at a loss if the non-spatial continuum is left out. Time provides the succession of events from the past through the present and to the future.¹⁸ Yet this chain of circumstances is not asymmetry. Rather, asymmetry is best described as temporal. The principle is of, or pertaining and concerning to time: And not simply the natural rotation of the Earth around the Sun.¹⁹

Doctrine, Metz and Johnson are not incorrect either. The ideas that any advantage--created by asymmetry in the first case, will assuredly change (over time), because another principle of asymmetry is at play--dynamic. That discussion follows this one, but in many ways is inseparable. The expanded temporal principle of asymmetry is more encompassing than the 'decay' that naturally occurs. In effect, the temporal dimension itself becomes the advantage that warriors seek.

Temporal is beyond, "how long will this surprise continue." This tends to relinquish thoughts to the past and present. The analysis of the future leads to "how much more" can I do than an opponent in the same exchange, period, or event--before it happens. This is explicitly tied to the principle of surprise and the ability to forecast the conditions that were planned, or forced upon either side.²⁰ Here again is the dual nature of this principle. Appreciating the temporal law of asymmetry requires commanders to consider two (or more) agents wrestling for advantage and simultaneously.

¹⁷ "C," civilian consideration is also added and is a sign of the times and FSO; even though civilians were and are a regular condition in conflict.

¹⁸ *American Heritage Dictionary* (2d ed. Boston: Houghton Mifflin Company, 1983), 1271.

¹⁹ *Ibid.*, 1251.

²⁰ This argument tends to overlap, if not enter the realm of "Shock and Awe." The author recommends the 2004 thesis, *Shock and Awe: A Widely Misunderstood Effect* by British author, Paul J. Blakesley.

This is why current doctrine has so much difficulty describing asymmetry in relation to ‘dissimilarities’ and ‘there are always asymmetries.’ The distinction is only clarified when the obvious advantage is had, or suddenly lost. A recent discussion in Iraq between a lieutenant and his commander illustrates this. After a captain corrected a young officer’s assessment that “they [the insurgents] (are) winning,” the lieutenant replied, “It seems like they’re outsmarting us.”²¹ Right or wrong, the rough analysis is that ‘they’ are ‘dissimilar’ and will continue to ‘outsmart us,’ because ‘there are always asymmetries.’ Further evidence in Figure 4 suggests that 14 percent of officers do not think that asymmetry will help them achieve military successes. The result is dispiriting.

The same figure also provides a more encouraging prospect for asymmetry and the temporal principle. Nearly one quarter (24%) of USA officers believe that asymmetry allows them to ‘think on their feet.’ In essence this is nothing more than the advantage gained partially by the temporal nature of asymmetry. The advantage is partial, because the dynamic principle requires this same characteristic. In conjunction with the 13 percent that believe asymmetry will allow them to ‘plan in greater detail,’ the prospects of regular and sustained US advantages are growing. Planning in great detail is part of the ‘how much more’ argument from before. Finally, the condensed definition as it fits into asymmetry:

Temporal. Time is simply the past, present and future and is a constant in military application. The temporal spectrum relates to the concern of time. In short, this relationship allows all combatants to: first, plan for the future; then, think and act on their feet in the present; and to always scrutinize, then accept as reality what has happened in the past--good or bad. A continuum of plans, actions, reactions, and assessment creates a gain on both sides, and thus a neutral effect. If the actual time to complete the process is less, perhaps more, or opposed to an opponents’ concern of time, a significant advantage can be realized. An advantage is created in this spectrum and lessened by the relation to other principles of asymmetry.

²¹ Patrick Kerkstra, “Morale Tested At Dangerous, Spartan Base,” *San Diego Union-Tribune*, 13 October 2004: 1.

Dynamic. Military operations are in a constant state of motion. This motion is current conditions, changes to the security environment, new or realized conditions, and progress in ways and means. This continuous activity creates obstacles to gaining a decisive advantage, and can itself, reverse gains. Overcoming these points of friction is essential. A combatant simplifies this by determining the temporal relationship of the conditions, environment and progress. A decisive advantage is achieved when this motion is directed at one common objective, although it may not appear as such (deception).

Asymmetry is dynamic and this is greatly inline with *Operations*. The FM uses terms and characteristic such as: comparative, relative, flexible, diverse, and dilemma to describe this eventual principle; it even goes as far as to call the nature of asymmetry--dynamic. The word choice in the explanation above is carefully chosen and distinguishes itself from *Operations* and this monograph.

Friction is one of these key terms and is adapted from Carl Von Clausewitz discussion of the same. The primary modification to Clausewitz' idea of chance and simple things being difficult is the focus on the conditions that create chance and difficulties.²² The advent of new technology, soldier education and diverse capabilities decreases the need for a sole "commander... [with] exceptional abilities."²³ This is not a critique of commanders, but rather it suggests that any combatant (from private to general) can realize (or stumble on) a condition, or more likely a series of conditions, that lead to or cause a decisive advantage across the levels of war (and thus the creation of a new "strategic corporal"). The contrast is not realizing the conditions which can lead to surprise (another principle), but rather it is focusing it toward an end. The temporal principle works in conjunction with dynamic, because it recognizes the relationships of the conditions.

Conditions are characterized earlier and are not limited to physical, psychological, numeric, environmental, perceived and actual objects that affect tactics, operations and strategy. This is a start, but the Army thinks and therefore faces a "thinking enemy." The word progress is used to accept the fact that any force will likely adapt in nearly all ways to achieve some

²² Carl Von Clausewitz, *On War*, 138-40.

²³ *Ibid.*, 140.

advantage. Again--duality, if not multiplicity comes into play in conflict; this also leaves Clausewitz' 'friction' safe for the ages. Not only will a foe change his conditions, but he will force (or attempt) change onto his opponent; all of the while conditions change via acts of God. This does not require forces to fold and accept this motion as willy-nilly and subject to divine intervention.

The principle has its greatest outcome when it applies the many conditions toward a common objective or goal. This allows dynamic to share with the principle of war: Objective (See Glossary). The break is using the created or given condition in conjunction with the "clearly defined, decisive, and attainable objective."²⁴ To that extent, the strategy, operation, or task will have that much more opportunity for success. The attack through a sand storm in 1991 by coalition forces against Iraq (Operation Desert Storm) provides a simple, but good example of multiplying objective and dynamic to achieve, through shaping, a decisive victory.

A final thought on dynamic has to do with deception and shaping. Whether all warfare is rooted in deception is questionable, but the fact remains that deception can add to the probability of success if the conditions are present. These conditions often require shaping through actions, or exploitation of existing circumstances. The appearance of both shaping and the existing conditions lies with the beholder and should be considered by a force maximizing deception. To defend against this, soldiers should constantly reevaluate the critical conditions determined in the temporal realm, as well as acknowledging the reality of progress mentioned earlier.

The final principle is wholeheartedly in line with doctrine and the responses from Figure 4 and Table 2. This principle is exploit: And is solely concerned with avoiding strength and leveraging against a weakness. The most likely source for this enduring law (if not all of them), but admittedly not provable, is *The Art of War* by Sun Tzu. There are countless references to the notion of exploiting: "attack him where he is unprepared;" "weak and strong points;" the "indirect

²⁴ FM 3-0, Operations, 4-12.

method;” “take advantage of the enemy’s unreadiness;”²⁵ et al. This also adds creditability to the notion that asymmetry ‘is as old as warfare itself.’

The cornerstone of this analysis (FM 3-0) would also have soldiers believe that the ‘degree of dissimilarity creates exploitable advantages,’ but this is wrong. The justification is based on the argument concerning ‘dissimilarities.’ It also fails to address when the ‘the little guy comes out of a closet and kicks the crap out of a big guy.’ The essential aspect to loan from *Operations* is beyond avoiding strength and attacking weakness and is the ‘creation’ portion. These are tasks, actions and tangibles that soldiers are prone to relate to, accept and modify over time. Exploit is not the commonly heard and doctrinal exploitation or the information operations term (see Glossary).

Exploit is best characterized as bold, audacious, and even unrestricted ways, means and ends. This fills a gap found in the *Myth* study. Eighteen (18) percent of officers described asymmetry as ‘unconventional,’ and another 24 percent were confident that innovative ways and means would lead to some planned goal. A total of 66 percent of officers would be inclined to agree with this principle if a force is also striking a weakness while avoiding an opponent’s strength. The aggregate view is not the only support for the principle. Besides countless historic vignettes that this can be applied to, some forward looking authors require that, “people have to change the way they think, plan and view the world”²⁶ in relation to asymmetry.

The well respected writing pair, Alvin and Heidi Toffler offer more insight into this principle, “war-forms evolve, technologies improve, and exactly as in the case of post-Napoleonic armies, steps are being taken to overcome the early limitation of the new war-form.”²⁷ This ‘new war-form’ is likely to capitalize on asymmetry, because of one specific

²⁵ Sun Tzu, *The Art of War*. Continuous reference, 7-105.

²⁶ Wayne M. Hall, *Stray Voltage: War in the Information Age* (Annapolis: Naval Institute Press, 2003), 55.

²⁷ Alvin and Heidi Toffler, *War and Anti-War: Survival at the Dawn of the 21st Century* (London: Warner Books, 1994), 237.

characteristic--unrestricted. This is the most controversial idea of the new principles of asymmetry. In many ways it captures what *Operations* tries to, or the idea that a 'resort to terrorism' would be asymmetry. The universal application of asymmetry allows any side to make the most of a decisive advantage. Therefore, the USA must 'overcome the early limitation' by maximizing this already recognized principle:

When we suddenly realize that all these non-war actions may be the new factors constituting future warfare... all of the boundaries lying between the two worlds of war and non-war, of military and non-military, will be totally destroyed, and it also means that many of the current principles of combat will be modified, and even that the rules of war may need to be rewritten.²⁸

The tip of this iceberg has shown itself more recently and with as much controversy. The book *Stray Voltage: War in the Information Age* argues nearly the same as our Chinese counterparts, "Conventional, industrial-age approaches... will be increasingly irrelevant and will often work to our [US] disadvantage."²⁹ Other authors quantify some measures of what will (or have) become unrestricted, "Americans must find release from powerfully ingrained moral strictures"³⁰ to benefit from asymmetry. The DOD, National Defense University, and the Army-Air-Naval War Colleges, among other have even partnered to address these important issues. A "principles of war essay contest" is one method, "Leaders at the highest levels now speak of a 'new kind of war.' This development should spark a debate: Have the principles of war changed; How are they changing; Or do they remain valid?"³¹ If there is one sure aspect of 'new war-forms,' it is that asymmetry will be present and utilizing exploit to the utmost degree:

²⁸ Qiao Liang and Wang Xiangsui, *Unrestricted Warfare* (Beijing: PLA Literature and Arts Publishing House, 1999), 12. See also Nicholas R. Reisdorff, *Winning the Hundreds Battles: China and Asymmetric Warfare* (Fort Leavenworth, KS: US Army Command and General Staff College, 2004).

²⁹ Wayne M. Hall, *Stray Voltage: War in the Information Age*, 54.

³⁰ Roger W. Barnett, *Asymmetrical Warfare: Today's Challenge to US Military Power* (Virginia: Brassey's Inc., 2004), 83-85.

³¹ Available on-line: <http://www.jhuapl.edu/POW/essay.htm>

Exploit. The greatest form of advantage is derived from avoiding a combatant's strengths, while focusing ones energy and resources at a weakness. The sum of employing all of the other principles of asymmetry is greater if a force exploits an enemy. Bold and often unrestricted ways, means and desired ends are associated with this principle. As such, there is significant risk associated with exploit: A failure to properly consider the principles of asymmetry, war, doctrine and the environment will lead to disastrous failure and probable defeat.

‘Asymmetry endures, but the nature of it evolves with the security environment.’

The four principles of asymmetry offered in this chapter will provide architecture for Army leaders and soldiers regardless of rank, or whatever spectrum of warfare they find themselves in. The non-prescriptive characteristics and word choice allow a holistic appreciation of the concept. This will lead to discussions of asymmetry and perhaps to heated discourse on its application. It is this discourse alone that may provide the ability to ‘tip a balance, exploit a condition; or create and prevent a surprise.’

Another way to think of asymmetry is through a mental model. Figure 5 depicts what this might look like. Stress is on *might*, because the complexity associated with conflict is beyond a snap shot. The large oval represents the principle of surprise and its most important element-- recognition. If there is a beginning to asymmetry, it lies here in the realm of the cognition of conditions. Lacking this principle, a soldier is likely to only endure the negative effects of asymmetry. The three conditions shown are building blocks from which relationships can be drawn. Choosing a condition to focus on is the critical aspect of this principle. The temporal principle creates a measuring stick that contrasts the concern of time between opposing forces. This is difficult to visualize, and only half of the equation is represented in Figure 5. Another model in Chapter 4 better illustrates this contrast and is the most likely candidate for a condition. The sum of employing all of the other principles is greater if the principle exploit is actionable. This of course, requires the recognition of the relations between conditions in the first place.

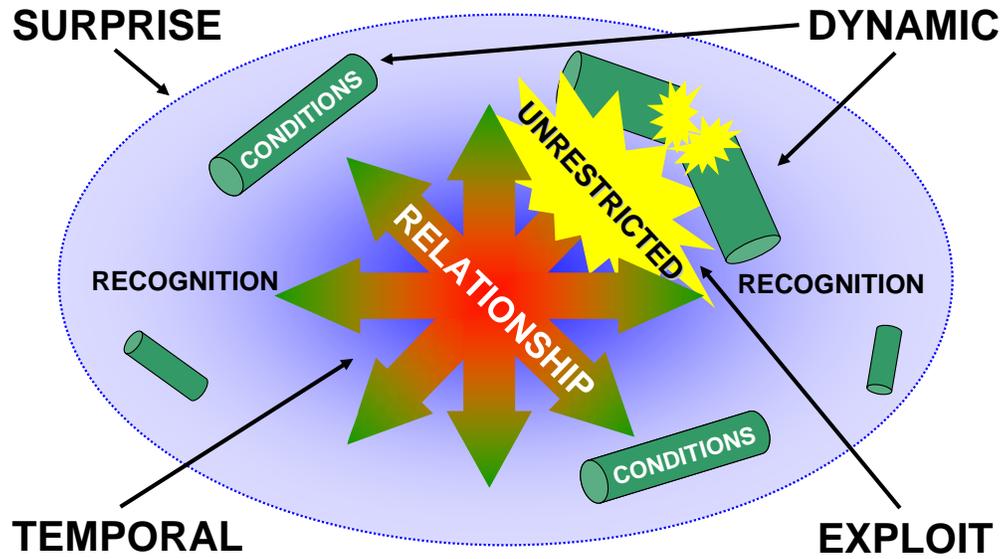


Figure 5. Mental Model of the Principles of Asymmetry

The next and final chapter summarizes the discussion of the principles of asymmetry. It also poses one last idea about the likely happenstance of asymmetry. If soldiers are apt to know where asymmetry will come into play, then they will be able to also determine when?

CHAPTER 4

CONCLUSION

Against asymmetric opponents, doctrine should provide a way to think asymmetry and an operational philosophy that would take asymmetry fully into account.¹

Clinton J. Ancker, *Doctrine for Asymmetric Warfare*

Chapter 1 asks, ‘Are there principles of asymmetry? If so, what are they?’ The overriding conclusion to this monograph is that principles, or enduring laws, are available to support the concept of asymmetry in conflict. The Army FM *Operations* and its definition of asymmetry provide the core for this thesis, while soldiers’ input rounds out the conclusion. A doctrinal definition can expand into principles without changing or contrasting the current PME structure. Still, the principles offered here only simplify the inherent complexity into transferable knowledge points. The concept remains ultra-complex at its core and will assuredly progress or morph with the times.

Asymmetry is therefore a combination and acceptance of: surprise, temporal, dynamic, and exploit principles. Put another way, the recognition of the relations between and of conditions increases the probability that countries, forces, and combatants will achieve significant and decisive advantage over their foe. The realization is found in the application of these principles in often unrestricted behavior that avoids strength and focuses on weakness (See Figure 6). Not ‘everything is asymmetric,’ because asymmetry has boundaries. Only ‘chance’ will trump this assertion.

All levels of war are susceptible to asymmetry. As such, so are all elements of combat power, formations, countries, soldiers, et al. The final section of this monograph clarifies in the

¹ Clinton J. Ancker and Michael D. Burke, “Doctrine for Asymmetric Warfare,” *Military Review* 83, no. 4 (July–August 2003): 18.

abstract the notion that ‘asymmetry always exists.’ It does not. The author cannot explicitly tell a soldier “when” asymmetry will come into play, but can provide insight on “where” it is more likely to occur. By focusing their effort and attention along existing, or created seams, the soldier is apt to deduce the ‘when.’ The military strength and weakness of seams is nothing new, but the idea that asymmetry has greater effect here is.

Principles of Asymmetry				
FM 3-0, Operations	<u>Surprise</u> Recognition	<u>Temporal</u> Relationship	<u>Dynamic</u> Conditions	<u>Exploit</u> Unrestricted
	Advantage	Decays over time	Comparative,	Advantage against weakness
	Not ready	Freedom of action	Relative	Avoid strength
	Take advantage	There are always asymmetries	Dynamic nature	Exploit, or extremely lethal
	Concerns: organization, equipment, doctrine, capabilities, and values	Exposure	Differing circumstances, Dilemma	Friendly strength, enemy vulnerabilities
		Flexible, diverse		
Common: Between forces--dual nature, Significant, Decisive				
Survey Responses	Think like my enemy	Think on my feet	“Beyond peer to peer”	Strike weakness
	“Unexpected” ²	“Alternatives”	“Imbalanced”	Avoid strength
	“Predict”	“Employ and protect”	“Different fronts”	Innovative way, means
	“Negates Advantage”	“Creative thinking”	“Unequal force”	Unconventional
	“Can’t match”	“Nothing new”	“Confusing”	“Greatest shock”
	“Crafting”	“Short shelf life”	“No certainty”	“Unfairly”
		“Synergistic way”		“Creative ways”

Figure 6. FM 3-0, Survey Results and Principles Compared

² All quotations are derived from 240 written survey responses (See Pomper).

Wave of Asymmetry

Armed with new principles of asymmetry, soldiers will undoubtedly apply them in historical case studies, professional courses, and in execution. To that end, it is beneficial to provide the likely frequency of asymmetry. This hypothesis takes on the idea that asymmetry is ‘everywhere and all of the time.’ This model is simplistic and is the final span from the affective to the cognitive domain. Regardless of chaos theory, the model is designed with future instruction in mind. For the Army to increase appreciation of asymmetry it must be able to translate the principles described earlier into learning objectives, lesson plans, and programs of instruction. This immediately begs the question, “Where and when is asymmetry most likely to be found or occur?” By answering ‘where’ in the abstract sense, the soldier’s ability to identify ‘when’ is improved. Figure 7 below is a culmination of two years research in asymmetry and military education.

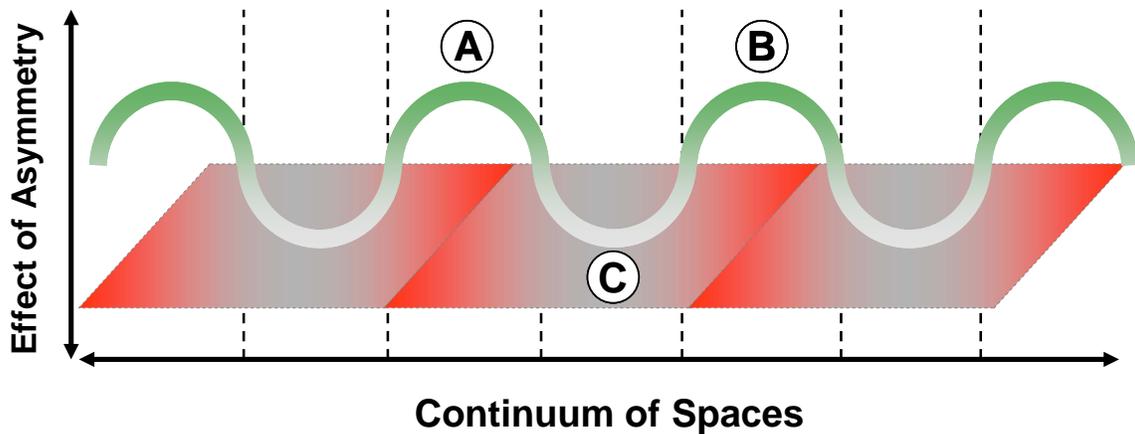


Figure 7. Wave of Asymmetry

Asymmetry is more prevalent at seams (point A and B) and between spaces (point C). These seams can be described as the overlap found at natural, physical and theoretical spaces. These spaces include: elements of national power (diplomatic, information, military and

economic, or DIME); unit boundaries; command relationships; service components; and all the way to individual fighting positions. The seams are also likely to include ground, air (including space), naval, and cyber-realm physical relationships. The seams, and thus asymmetry, also provide a technique to appreciate the “grey area” between at least two accepted conditions; conventional versus unconventional. These are nonfigurative examples that do not complete the list, and are in many ways part of a discussion on asymmetry. As such, the transparency of this seam is also in question. A third component to the hypothesis is the effect, or the advantage discussion developed earlier. The effect that asymmetry has on an opponent is greater along these seams and less in the spaces.

The ability to exploit in a space is reduced by refined and tested doctrine, organizations, training and array of human experts engaging in their specialty. Another way to think of the many spaces is as a series of mature environments--developed and hardened against effect. It is more than a general sense of security; the sum of these precludes the decisive application of the principles. This is not ground breaking military theory. Warriors have always recognized the importance of seams in battle; whether it is their own or their opponents. A discussion of seams will already produce comments like: “How do I recognize it;” “What effect does, or can it have;” “If I can exploit the seam, what will happen;” “How do I protect my own seams?” There is then, direct correlation from the principles developed earlier and already accepted military theory and doctrine. The novel idea is the four principles and an appreciation of them--a vehicle to simplify and apply the advantages that asymmetry can produce.

An increased appreciation of asymmetry has a flattening effect on the wave in Figure 8 (line Y opposed to line X). This is associated with reducing the probability that asymmetry will effect friendly forces. In contrast, the probability of increasing asymmetry on an opponent is increased (line Z). These lines are not static, but rather in constant fluctuation. The causes are many and include: countless spaces and seams, progress in ways and means (see the principle:

Dynamic), and the advent of unrestricted 'war-forms.' The daunting idea reinforces the complex nature of asymmetry, but there is significant optimism or pessimism (depending on your desired end) on cracking point C, or the spaces that evade asymmetry.

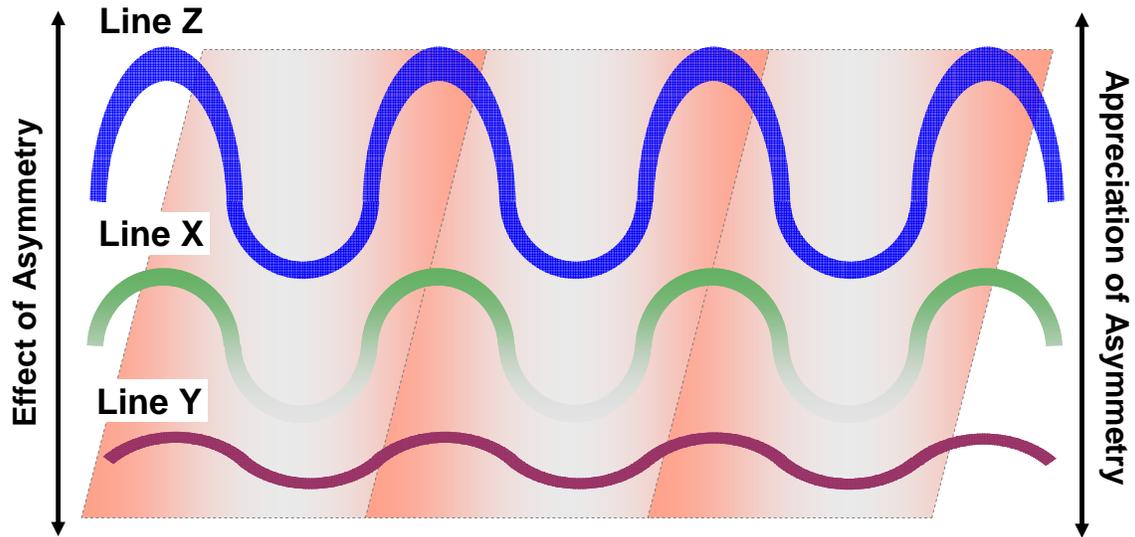


Figure 8. Appreciation and Effect of Asymmetry

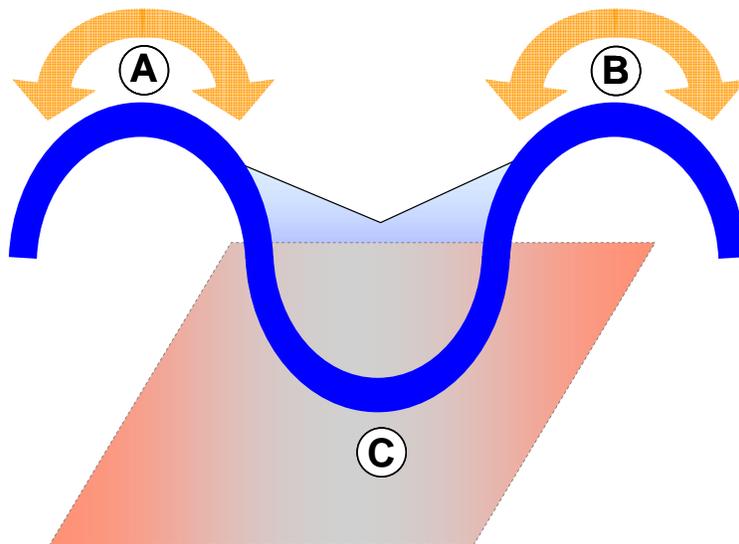


Figure 9. Spaces Are Not Always Safe

The points A and B (higher probability and effect of asymmetry) on the wave in Figure 9 have influence on point C, or a space. Regardless of how mature the space is, the effect of asymmetry (by nature) has relations in the spaces. The space is often an insurmountable hurdle that must be contended with to defeat an adversary. In this instance, the application of the principles relies more on dynamic. The recognition of dual (or multiple) conditions, relations and their effects forces the wave to shift into the space. This is likely due to the directed actions by, or omissions of, an opponent. A simplified example of this is the French over-reliance on the Maginot line and the German advance through the Ardennes region in World War Two. A conclusion from this model is not to solely strengthen the space (e.g.... more guns and a longer Maginot line), because the effects of asymmetry flow to the space--and not the reverse. The greater preparation is reducing the wave in the first place, or appreciating asymmetry (See Figure 8). This is the lasting legacy of asymmetry.

The wave of asymmetry is abstract in that it simplifies the numerous spaces and seams found in war. In many ways this monograph and asymmetry echo in the theoretical realm. It does however provide a new construct for Army soldiers and their stubborn culture to judge and potentially change from. Eventually the Army will accept these principles of asymmetry, a hybrid of them, or modify the principles of war to encompass asymmetry. Without enduring and applicable laws of an essential component of warfare, the US Army, if not the Nation will succumb to “a more significant challenge to the country than any threat that has heretofore surfaced.”³ A greater appreciation and acceptance of asymmetry will help prevent this.

What should the future of the principles of asymmetry bring? The next logical step is to test the principles proposed here. The best method is an old method, and will include historical case studies pitting conflicts and actions against the interplay of the principles. These in turn will provide examples of what to do, and what not to do in war. Admittedly, even a perfect work will

³ Wayne M. Hall, *Stray Voltage: War in the Information Age*, 55.

not capture every aspect of asymmetry, but any improvement is just that. The countless new release of books on past conflicts already needs a new approach.

The prospect that these principles will have application today and in the future is also good. While case study is important, a parallel approach to putting asymmetry into US-centric play is recommended. The result will be increased appreciation--if by brute and directed use alone. A means to achieve this follows several avenues: develop a DOD sponsored White Paper on the principles of asymmetry; charge other services to undertake notional applications of the principles in conjunction with accepted PME rigor; and modify existing doctrine at the earliest time possible.

In many ways Army doctrine encompasses the notion of asymmetry well enough to get this far. The ability of soldiers to appreciate asymmetry is lost somewhere in the development and translations process. The Army should accept this and move on. The target audience for the principles of asymmetry should be junior and mid-grade leaders, because there is truth to the saying that, "you can't teach old dogs new tricks." Besides, there is evidence to support that more senior Army leaders have already accepted and maximize the concept of asymmetry. Oddly enough, the correlation is asymmetric (in the English sense).

TABLES

Table 1. By Rank: Scale Responses						
Question	Rank	Strongly Agree %	Agree %	Unsure %	Disagree %	Strongly Disagree %
I appreciate, or am fully aware of <u>leadership</u> as it applies to military applications	CPT	58	42	0	0	0
	MAJ	63	35	3	0	0
	LTC	78	22	0	0	0
	COL	100	0	0	0	0
	AGGREGATE	65	33	1	0	0
I appreciate, or am fully aware of <u>asymmetry</u> as it applies to military applications	CPT	25	47	21	6	2
	MAJ	29	53	12	4	1
	LTC	38	49	14	0	0
	COL	67	33	0	0	0
	AGGREGATE	30	50	15	4	1
My peers appreciate, or are fully aware of the term 'asymmetry'	CPT	6	30	51	11	2
	MAJ	12	49	27	9	3
	LTC	11	46	30	11	3
	COL	0	67	33	0	0
	AGGREGATE	10	43	35	10	2
The term 'asymmetric' is overused in military jargon and professional discussions	CPT	6	28	42	23	2
	MAJ	35	31	17	17	0
	LTC	19	41	19	22	0
	COL	67	0	0	33	0
	AGGREGATE	23	32	25	20	1
'Asymmetric' is used in accordance with doctrine, based on my education and experiences	CPT	2	37	46	13	2
	MAJ	3	44	23	27	4
	LTC	3	38	22	30	8
	COL	33	33	0	33	0
	AGGREGATE	3	40	29	23	4
I rely on doctrinal references to expand my appreciation for 'asymmetry'	CPT	4	36	25	32	4
	MAJ	12	31	11	43	4
	LTC	8	43	16	30	3
	COL	33	33	0	33	0
	AGGREGATE	9	35	16	36	4
Fixed-wing close air support (CAS) should be considered an 'asymmetric attack'	CPT	6	17	30	28	19
	MAJ	5	19	23	37	16
	LTC	3	14	16	35	32
	COL	0	0	0	0	100
	AGGREGATE	5	17	23	33	22

Table 2. Response to: “You best describe ‘asymmetric’ as”					
Rank	Striking weakness, while avoiding strengths %	Unconventional %	No available response for an action %	Imbalanced or not equal %	Threat using innovative ways and means to an end %
CPT	30	26	0	26	18
MAJ	22	20	4	38	16
LTC	19	8	3	22	49
COL	0	0	50	50	0
Aggregate	24%	18%	3%	31%	24%

Table 3. Response to: “How will your appreciation of ‘asymmetry’ translate into military success”					
Rank	It won't %	I'm able to think like my enemy %	I can better “think on my feet” %	I can plan in greater detail %	Open Response %
CPT	4	43	23	17	13
MAJ	25	20	30	5	20
LTC	32	26	16	11	16
COL	0	0	33	0	67
Aggregate	14%	32%	24%	13%	16%

Table 4. 33 Asymmetric Occurrences		
Response	Methods	Approaches
Threat(s)	Attacks	Strategy
Weapons	Ways	Means
Offense	War / Warfare / <i>Conflict</i> ¹	Terrorists
Environment	Conditions	Enemy
Engagements	Concepts	Advantages
Forces	Relationships	Effects
Manner	Weapon System	Combat Power
Measures	Information Warfare	Symmetry
Operations	Force	Application
Leverage	Personnel Services	Activities

¹ ‘Conflict’ is arguably the first use of anything ‘asymmetric.’ Andrew Mack published, *The Concept of Power and Its Uses in Explaining Asymmetric Conflict* in 1974, and *Why Big Powers Lose Small Wars: The Politics of Asymmetric Conflict* in 1975. Source: a GOOGLE search on 11 October 2004.

GLOSSARY

Appreciate. To recognize the quality, significance, or magnitude of; value. To be fully aware of or sensitive to; realize (See Berube, 121).

Asymmetry. Dissimilarities in organization, equipment, doctrine and values between other armed forces (formally organized or not) and US forces. Engagements are symmetric if forces, technologies, and weapons are similar; they are asymmetric if forces, technologies, and weapons are different, or if a resort to terrorism and rejection of more conventional rules of engagement are the norm (See FM 1-02, 1-15). See Appendix C for the full definition provided by FM 3-0, Operation. Both the FM 1-02 and 3-0 use the same initial description.

Asymmetric Attack (United Kingdom). Actions undertaken by state or non-state parties (friendly or adversary), to circumvent or negate an opponent's strength and capitalize on perceived weaknesses through the exploitation of dissimilar values, strategies, organisations and capabilities. Such actions are capable, by design or default, of achieving disproportionate effects, thereby gaining the instigator an advantage probably not attainable through conventional means (See UK, JWP 0-01.1, A-26).

Doctrine. Fundamental principles by which the military force or elements thereof guide their actions in support of national objectives (See JP 1-02, 165).

Exploit. In information operations, to gain access to adversary command and control systems to collect information or to plant false or misleading information (See FM 1-02, 1-75).

Exploit. To employ the greatest possible advantage. To make use of selfishly or unethically (See Beurbe, 478).

Exploitation. Taking full advantage of success in military operations, following up initial gains, and making permanent the temporary effects already achieved (See FM 1-02, 1-75:76)

Objective. Direct every military operation toward a clearly defined, decisive, and attainable objective (See FM 3-0, 4-12).

Surprise. The purpose of surprise is to strike the enemy at a time or place or in a manner for which it is unprepared (See JP 3-07, 667).

Terrorism. The calculated use of unlawful violence or threat of unlawful violence to inculcate fear; intended to coerce or to intimidate governments or societies in the pursuit of goals that are generally political, religious, or ideological. See also antiterrorism; combating terrorism; counterterrorism; force protection condition; terrorist; terrorist groups (DOD Dictionary--online).

Terrorist. An individual who uses violence, terror, and intimidation to achieve a result. See also terrorism (DOD Dictionary--online).

Unconventional Warfare. A broad spectrum of military and paramilitary operations, normally of long duration, predominately conducted by indigenous or surrogate forces who are organized, trained, equipped, supported and directed in varying degrees by an external source (See JP 3-07, 713).

APPENDIX A

SURVEY FROM PREVIOUS STUDY

Current and Future Military Operations

This survey will take approximately five minutes of your time.

Thank you for your time and effort!

The purpose of this research is to enhance service member's education for current and future military operations.

This survey is used to partially complete a thesis for a Masters in Military Science at Fort Leavenworth, Kansas.

Individual responses on this survey form are **anonymous**; comments on this form may be used in the research with your approval.

Aggregate results of this survey are used in statistical analysis to form broad conclusions and recommendations.

Return this form by:

- Emailing: MAJ Stephen Pomper
stephen.pomper@us.army.mil
- Calling to arrange pick up:
913-680-1021
- Returning to carrier.
- Drop-off at Bell Hall:

**Development and Assessment
Division, Survey Drop Box
Room: 132**

Control Number
04-015
CGSC - DAD
Official: **RG**

Please complete the following:

I am a (an):

- Airman
- Soldier
- Marine
- Sailor



I am a:

- Captain (O3)
- Major or Lt Commander (O4)
- Lieutenant Colonel (O5)
- Colonel or Captain (O6)
- Retired / Civilian with close military ties

~ Turn over to complete ~

SURVEY: CONTINUED

Current and Future Military Operations

Respond to the following using this scale:	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
I appreciate, or am fully aware of <u>leadership</u> as it applies to military applications	<input type="radio"/>				
I appreciate, or am fully aware of <u>asymmetry</u> as it applies to military applications	<input type="radio"/>				
My peers appreciate, or are fully aware of the term 'asymmetry'	<input type="radio"/>				
The term 'asymmetric' is overused in military jargon and professional discussions	<input type="radio"/>				
'Asymmetric' is used in accordance with doctrine, based on my education and experiences	<input type="radio"/>				
I rely on doctrinal references to expand my appreciation for 'asymmetry'	<input type="radio"/>				
Fixed-wing close air support (CAS) should be considered an 'asymmetric attack'	<input type="radio"/>				

You best describe 'asymmetric' as (select one):

- Striking weakness, while avoiding strengths
- Unconventional
- No available response for an action
- Imbalanced or not equal
- Threat using innovative ways and means to an end

How will your appreciation of 'asymmetry' translate into military success (select one):

- It won't
- I'm able to think like my enemy
- I can better "think on my feet"
- I can plan in greater detail
- _____

Please provide comments below on 'asymmetry' that are on your mind or not addressed.

If you do not want your anonymous comments published please select:

- Do not use



~ Return information is on the reverse. Thank you again! ~

APPENDIX B

MILITARY ASYMMETRY²

Asymmetry is imbalance or unequal and is not the same as military asymmetry, because it can be quantified with certainty. For example, there is asymmetry between the M1A2 MBT and the M2A3 BFV by approximately 35 tons, which is surely an important fact if you intend to cross bridges.

Military asymmetry or Masymmetry is an age-old concept that simply recognizes that a relationship between conditions creates fleeting unknowns. It is synonymous with another timeless phrase that has become common jargon, “the fog of war,”³ but cannot be left to the maxim alone. Conditions are numerous and are not limited to: physical, psychological, numeric, environmental, perceived and actual objects that affect tactics, operations and strategy in conflict. The relationship is often spurious and involves many existing or created conditions. Recognizing these relations and conditions allows combatants to answer unknowns.

Once the relation of these conditions is known, existing or new doctrinal terms are used to better define the circumstance. Even so Masymmetry remains, because it also recognizes constant, diverse, fast and slow change over time--or fleeting. What is definite now may become Masymmetric an instant later. Masymmetry is not solely a reactionary concept, but rather a continuum of conditions, relations and cognition. As such, it is difficult and critical to appreciate.

Masymmetry may or may not create an environment of advantage for friendly or enemy forces and it is not simply attacking weakness, while avoiding strength: Although the concept is applicable in this case, because a series of conditions is created or used to force an unknown on your opponent. Therefore, using the term Masymmetric to define the concept requires that service members explain the conditions and the relationship between them.

Masymmetry is not an adjective--it modifies nothing by itself. It is not enough to say that Masymmetry always exists and be content. Knowing is critically important to successful military operations. Defining, creating or reversing this relation to conditions fuses the art and science of warfare. In essence, understanding the Masymmetry concept in detail lifts ‘the fog of war.’

² The appendix is slightly modified in style from the original study by this author. No substantive changes are worth noting.

³ Although Carl von Clausewitz is assuredly the owner of these famous three words, the author means to contrast the commonly heard military phrase to his own definition; and does not make a distinction to the more scholarly meaning in which it is used.

APPENDIX C

FM 3-0: ASYMMETRY⁴

Asymmetry concerns dissimilarities in organization, equipment, doctrine, capabilities, and values between other armed forces (formally organized or not) and US forces. JFCs arrange symmetrical and asymmetrical actions to take advantage of friendly strengths and enemy vulnerabilities, and to preserve freedom of action. Engagements are symmetric if forces, technologies, and weapons are similar; they are asymmetric if forces, technologies, and weapons are different, or if a resort to terrorism and rejection of more conventional rules of engagement are the norm. In one sense, there are always asymmetries between forces: differing circumstances lead to differing military structures. Asymmetry becomes very significant, perhaps decisive, when the degree of dissimilarities creates exploitable advantages. Asymmetric engagements can be extremely lethal, especially if the target is not ready to defend itself against the asymmetric threat. Asymmetry tends to decay over time as adversaries adapt to dissimilarities exposed in action. In a larger sense, asymmetric warfare seeks to avoid enemy strengths and concentrate comparative advantages against relative weaknesses. The following tactical and operational examples illustrate the dynamic nature of asymmetry.

Third Army forces in the Gulf War were equipped with second-generation thermal sights. Iraqi units depended upon older, far less capable active infrared and light amplification systems. In engagements after engagement, US, British and French armor destroyed Iraqi units, who could only return ineffective fire. At the system level, the advanced armor on the US and British tanks resisted the occasional hit from Iraqi fire, while friendly rounds immediately destroyed their targets. At tactical levels, Army forces exploited asymmetry in term of equipment and organization.

In 1999, Serbian forces in Kosovo faced unrelenting aerial bombardment by North Atlantic Treaty Organization (NATO) air forces. As the air operations intensified, NATO refined its strikes techniques while the Serbs applied techniques learned by the Iraqis during the Gulf War. Over time, the Serbs became very proficient at using decoys and concealment. Although they were unable to prevent losses, Serbian units protected most of their ground combat systems from this asymmetric attack. Thus, the asymmetric advantage conferred by advanced air power over ground forces elements decayed over time.

At the operational level in the Gulf War, USCENTCOM exploited the inherent flexibility of sea power and amphibious assault to threaten the Iraqi forces in Kuwait with a major strike from the Persian Gulf. Lacking a navy, the only possible operational response by the Iraqi high command was to shift six divisions to coastal defense. The coalition ground offensive enveloped and destroyed these Iraqi forces, which were fixed by the threat of amphibious assault.

⁴ FM 3-0, Operations, 4-31--4-32.

FM 3-0: ASYMMETRY Continued

The likelihood of asymmetric attack increases with the continued conventional dominance of US forces at sea, on land, in the air, and in space. Such attacks may only disrupt tactical activities briefly; however, the operational and strategic consequences, particularly in stability operations and support operations, may be far-reaching. In Beirut, Lebanon, in 1983, and again at Khobar Towers, Saudi Arabia, in 1996, massive truck bombs destroyed portions of US military compounds, with heavy loss of life. Both attacks demonstrated asymmetry in terms of equipment and values. In addition, each was a political act of terrorism taken against a military objective. The risks of asymmetry multiply with the threat of WMD.

Asymmetric attacks pose dilemmas to both friendly and enemy forces. Countering asymmetric attacks requires the disadvantaged side to alter rules of engagement, organization, doctrine, training, or equipment. The higher the echelon, the longer it takes to remedy an enemy asymmetric advantage. To reduce the vulnerability to asymmetric attacks and to minimize their effects, Army organizations, training, and equipment emphasize flexible employment in diverse situations. Protective measures, such as physical security and OPSEC, lessen the effects of asymmetry. A credible NBC defense capability at the tactical level deters the use of WMD. Commanders must anticipate asymmetries and take preventive measures that reduce adversary advantages. Commanders identify and exploit friendly capabilities that pose asymmetric challenges to the enemy force, even as Army forces act to counter hostile asymmetric threats.

APPENDIX D

SUMMARY OF THE PRINCIPLES OF ASYMMETRY

Asymmetry increases the likelihood that one opponent will achieve some level of success over others. This is sometimes significant and decisive, and not always in a purely military context. Asymmetry also provides combatants at all levels with a non-prescriptive set of principles to: tip a balance, exploit a condition; or create and prevent a surprise. It is not a guarantee for success, but rather an aid and is used in conjunction with: leadership, other principles, doctrine, equipment, values, experience and organizations. The concept is timeless and is addressed by all military theorists and in as many ways. Therefore, asymmetry endures to this day.

Asymmetry endures, but the nature of it evolves with the security environment. New equipment, organizations, means and values, to name only some, create innovative circumstances or conditions that are unknown based on current doctrine and experiences. This mix of innovation is not necessarily new in the time sense, but rather is the combination of existing conditions and their relations. This has a profound and previously unknown impact. The United States and its allies use asymmetry to win engagements, battles, and wars. As such, our opponents have the same opportunity. Appreciation for the concept and the principles that give it foundation increase the probability of success at the strategic, operational and tactical levels of war.

Surprise. The ability or inability to anticipate conditions in conflict will add to asymmetry. Conditions are numerous and are not limited to physical, psychological, numeric, environmental, perceived and actual objects that affect tactics, operations and strategy. Cognition in relation to friendly, enemy, and countless conditions, whether planned or realized, allows this principle to gain or lose a position of advantage. The effect of these conditions exploits the failure of a side to recognize or anticipate.

Temporal. Time is simply the past, present and future and is a constant in military application. The temporal spectrum relates to the concern of time. In short, this relationship allows all combatants to: first, plan for the future; then, think and act on their feet in the present; and to always scrutinize, then accept as reality what has happened in the past--good or bad. A continuum of plans, actions, reactions, and assessment creates a gain on both sides, and thus a neutral effect. If the actual time to complete the process is less, perhaps more, or opposed to an opponents' concern of time, a significant advantage can be realized. An advantage is created in this spectrum and lessened by the relation to other principles of asymmetry.

Dynamic. Military operations are in a constant state of motion. This motion is current conditions, changes to the security environment, new or realized conditions, and progress in ways and means. This continuous activity creates obstacles to gaining a decisive advantage, and can itself, reverse gains. Overcoming these points of friction is essential. A combatant simplifies this by determining the temporal relationship of the conditions, environment and progress. A decisive advantage is achieved when this motion is directed at one common objective, although it may not appear as such (deception).

PRINCIPLES OF ASYMMETRY Continued

Exploit. The greatest form of advantage is derived from avoiding a combatant's strengths, while focusing ones energy and resources at a weakness. The sum of employing all of the other principles of asymmetry is greater if a force exploits an enemy. Bold and often unrestricted ways, means and desired ends are associated with this principle. As such, there is significant risk associated with exploit: A failure to properly consider the principles of asymmetry, war, doctrine and the environment will lead to disastrous failure and probable defeat.

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