

Increasing Strategic Responsiveness: Rotating U.S. Army Corps Through Phases of the National Military Strategy

**A Monograph
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Abstract

Increasing Strategic Responsiveness: Rotating US Army Corps Through Phases of the National Military Strategy, by MAJ Michael A. Getchell, 026-62-2391, 75 pages.

The purpose of this monograph is to answer the question: Can the Army increase its strategic responsiveness in order to narrow the current gap between Army capabilities and requirements? To arrive at an answer, this paper begins by examining complexity theory to provide the cognitive tools necessary to understand how systems interact with their environments. Chapter three examines the changes in the national security and military strategies in response to international and domestic factors over the last decade. It also assesses the impact these changes produced, an imbalance between Army requirements and capabilities. Utilizing Martin Van Creveld's rules for enhancing command performance, chapter four explores alternative proposals that aim to close the gap between requirements and capabilities by increasing strategic responsiveness. While investigating the problem and potential solutions, it became clear that versatility is the key to reducing this gap. Versatility, the capacity to shift capabilities to meet requirements, is achieved by separating the force in time and purpose. However, without rotation of forces between missions, the force becomes agile and not versatile. In particular, the paper recommends the Army divide its overarching requirement to fight and win the nation's war into the three domains of the 1997 National Military Strategy (NMS) and establish semi-independent forces capable of dealing with each of these domains separately. It postulates a model that rotates balanced corps between the domains of shape, prepare, and respond. By rotating the force between the domains, the Army builds a versatile general-purpose force, increases its stability, and reduces the effects of a demanding OPTEMPO. The combined effect is a force with the increased strategic responsiveness required to narrow the ever-shifting gap between capabilities and requirements.

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Table of Contents

Approval Page.....	i
Abstract	ii
Acknowledgements.....	iii
Table of Contents.....	iv
Table of Figures	vi
Chapter 1.....	1
Background and Significance	1
Methodology	3
Scope	4
Terminology.....	4
Chapter 2.....	8
Introduction.....	8
Complexity Theory, Breaking the Tradition of Linear Reductionism.....	9
Complex Adaptive Systems	12
It Gets More Complex	13
Putting It all Together, the Complexity Shuttle	17
A Way to Operate in Complexity	19
Summary	22
Chapter 3.....	24
Introduction.....	24
The Transformation of National Security Policy.....	24
A New National Military Strategy to Meet a Changing Security Strategy.....	30
MTW vs. SSC: An Ends/Means Circle or Square?.....	33
High OPTEMPO and The Declining Capability to Win The Second MTW.....	41

Summary	43
Chapter 4.	46
Introduction.....	46
Versatility Revisited: The Way to Achieve Full-Spectrum Dominance?	47
Van Creveld’s Third Rule, the Way to Make Versatility Work.....	49
FORSCOM Balkans Sourcing Strategy – A General-purpose Structure.....	50
The Aerospace Expeditionary Force – A General-purpose Force Structure	51
Vinson’s Mission-Focused Structure.....	55
Initial Entry, Crisis Response Forces – A Mission-focused Structure.....	59
Summary	62
Chapter 5.	63
Introduction.....	63
Conclusions	63
Recommendation: An Organizational Model of Rotating Forces Between Requirements	68
Implications.....	74
Bibliography.....	76
Books.....	76
Articles and Periodicals.....	77
Government Documents.....	81
Monographs, Reports, and Theses.....	83

Table of Figures

Figure 2.1 The Period Doubling Cascade	18
Figure 3.1 The Period Doubling Cascade Revisited	39
Figure 4.1 Air Force Rotation Scheme and Mission Domains	53
Figure 5.1 Proposed Alignment of Combat Brigades, Divisions, and Corps	70
Figure 5.2 Mission Domains and Rotation Scheme	71

Chapter 1.

Background and Significance

On 12 October 1999, the Army Chief of Staff, General Eric K. Shinseki spoke at the Eisenhower Luncheon of the forty-fifth annual meeting of the Association of the United States Army (AUSA). Surprising many attendees, he unveiled plans for a complete transformation of the United States Army. Like a stone hitting a calm pool, General Shinseki's view of the Army produced a series of waves that affect not only today's Army, but also the future Army, the Department of Defense (DOD) and the nation. Today, these ripples continue to expand. Some bouncing off the bureaucratic structures of Government, DOD, private industry, and academic institutions, while others have dissipated.

To achieve Army transformation, the Chief emphasized, "we will begin immediately to turn the entire Army into a full spectrum force which is strategically responsive and dominant at every point on the spectrum of operations."¹ This statement, when weighed against the growing cacophony over the Army's relevance in the wake of the war in Kosovo, seemed more dream than reality.² Compared to the Air Force's performance, the Army's effort in meeting the request of the theater commander for combat forces in support of Operation Allied Force was shameful.

Moreover, the nearly forty percent reductions in military budgets and force, in concert with the 300% increase in military operations over the last decade, have resulted in a highly taxing operational tempo (OPTEMPO).³ Operational tempo affects unit readiness, soldier

¹ General Eric K Shinseki, "Address to the Eisenhower Luncheon, 45th Annual Meeting of the Association of the United States Army," (12 October 1999): [Online], available at http://www.tradoc.army.mil/transformation.Data%20Pages/address_to_the_eisenhower_luncheon.htm. Internet, accessed 30 December 2001.

² For example see Jeffery Record, "Operation Allied Force: Yet Another Wake-Up Call for the Army"?, *Parameters: US Army War College Quarterly* 30, no.1 (Winter 1999-2000): 15-23. [Online], available at <http://carlisle-www.army.mil/usawc/parameters/99winter/record.htm>. Accessed 09 November 2001, Daniel Verton, "Army Battles Irrelevancy," *Federal Computer Week*, (15 November 1999), and John Barry & Evan Thomas, "Not Your Father's Army," *Newsweek*, (22 November 1999): 49-52.

³ James M. Dubick, "Building a Strategy-based Force Structure," The Association of United States Army's Institute of Land Warfare Landpower Essay Series, No. 99-10, (December 1999): 5.

retention, and ultimately the Army's flexibility. Clearly, there is a multifaceted gap between reality and General Shinseki's vision - between capabilities and requirements. Out of this disconnect rises the central question this paper seeks to answer; can the Army increase its strategic responsiveness in order to narrow this gap in the near future?

More specifically, this paper presents a case for the Army to rotate forces between the strategic domains of shape, respond, and prepare in order to increase its strategic responsiveness while simultaneously reducing its operational tempo (OPTEMPO) *today*. The American people and today's complex environment can ill afford to wait until transformation is complete to realize increased Army strategic responsiveness.

The hypothesis is that the alignment of specific forces to particular mission domains, for a specified time, allows the Army to simultaneously shape with one corps, prepare with another corps, and maintain a separate corps sized force ready to respond. Similar to Martin Van Creveld's third rule for enhancing command performance, this proposal divides the task of promoting America's security policy into three domains and establishes subordinate forces that concentrate on the tasks within one domain instead of all three domains simultaneously.⁴ Separation in time and purpose allows part of the force to respond to an emerging crisis, while other forces continue to shape the international environment, deterring a potential second major theater war. Combined, this has the effect of increasing the Army's strategic responsiveness. Furthermore, it argues that specialized, mission-specific forces are not required to execute this proposal.

A general-purpose force, provided the time to train, can accomplish today's military objectives. Currently, training is distributed among the tasks of shape, prepare and respond,

⁴ Martin Van Creveld, *Command in War*, (Cambridge: Harvard University Press, 1985), 269. Van Creveld differentiates between three approaches to change command and control systems: 1) increase the organization's capacity for information processing, 2) restructure the organization so as to enable it to operate with less information, 3) divide the task into various parts and establish forces capable of dealing with each of these parts separately on a semi-independent basis. He concludes the third is superior to the previous two.

imposing a training dilemma for commanders. Mainly, without a clear idea of future missions and potential locations, which training takes priority, war fighting or peace operations? However, by first defining the purpose of training, and then centralizing training under the prepare domain, forces are certified ready for both a major theater war (MTW) or a smaller-scale contingency (SSC) before assuming missions in the respond domain. Rotating a general-purpose force between the domains fosters versatility, increases stability, and reducing the effects of OPTEMPO. By balancing requirements with capabilities, the Army can simultaneously deal with the uncertainty of today's international environment and execute its long-term requirement of transformation according to its campaign plan. Additionally, the proposed model increases joint integration and interoperability by aligning the Army's rotational schedule with that of the US Navy and US Air Force.⁵

Methodology

This paper begins by examining complexity theory in order to provide the cognitive tools necessary to proceed in successive chapters. Chapter three examines what has changed in the international and domestic environments over the last decade and the effects of these changes on the formulation of America's security policy. Furthermore, this chapter demonstrates how an imbalance between requirements and capabilities developed. The chapter concludes by illustrating that this imbalance is manifested in a high OPTEMPO, and an inhibited strategic responsiveness. Chapter four, utilizing tools from the study of complexity theory, explores alternative proposals that aim to close the gap between requirements and capabilities by increasing strategic responsiveness and reducing OPTEMPO. The final chapter draws conclusions from previous chapters to propose a model based upon a general-purpose force

⁵ Will W. Gildner Jr, Kevin P. O'Keefe, and Anthony J. Tata, "Forcing Goldwater-Nichols to the Grassroots: Training Future Joint Crisis Response Forces," (Strategy Research Project, US Army War College, 2000). The authors propose a model of aligning Army response forces with Navy and Air Force rotating response forces. For their model to operate, the authors propose shielding Army response forces (pg 36) from current engagement tasks.

designed to increase Army strategic responsiveness while simultaneously reducing the effects of a demanding OPTEMPO - today. This chapter ends by reviewing some of the implications of the proposed model.

Scope

The scope of the paper is not all encompassing. Assumptions and limitations are required to manage the effort. Three assumptions form the foundation of this study. First, shaping the international environment through engagement will remain a cornerstone of America's national security and military strategies. Second, for some time to come the size of the Army will remain approximately the same as stated in the 2001 Quadrennial Defense Review (QDR).⁶ Finally, Army units trained in war fighting can also accomplish peace operations.

A number of limitations also assist with the scope of the effort. To begin, no classified material is used. Next, this document focuses on conventional Army forces, specifically its corps. Because the paper seeks to build a framework on which to hang a future conventional Army force structure, this paper does not focus on doctrine, but centers on changes in the organizational design of current and future force structure.

Terminology

A shared understanding of some key terms, found throughout this monograph, enhances comprehension. Included are explanations for strategic responsiveness, readiness, versatility, agility, and OPTEMPO. As some terms are components of other concepts, keeping the definitions in mind will facilitate overall command of the material. Furthermore, comprehension of the major terms used throughout the study links its significance with its body.

⁶ Donald Rumsfeld, "Quadrennial Defense Review Report," (Washington: Government Printing Office (GPO), 30 September 2001). See page 22, four corps headquarters, ten active divisions, and two armored cavalry regiments, eight reserve divisions, and fifteen enhanced brigades. Herein referenced as 2001 QDR.

The importance of strategic responsiveness is not lost upon the Army. Current doctrine devotes an entire chapter to explaining this important concept.⁷ Though no single, succinct definition for the term exists, FM 3-0 notes strategic responsiveness “requires Army forces trained, organized, and equipped for global operations, and commanders and units proficient at force projection.”⁸ Additionally, TRADOC PAM 525-3-0 indicates, “responsiveness has the quality of time, distance, and sustained momentum.”⁹ Expressed as an art, strategically “responsive forces provide Joint Force Commanders (JFC) a preemptive capability to deter adversaries, shape the situation, and fight and win if deterrence fails.”¹⁰ Putting it all together, **Strategic Responsiveness** requires Army forces ready to go, on a moment’s notice, and able to perform a variety of missions, anywhere in the world.

Critical to strategic responsiveness is readiness. Joint Publication 1-02 defines **Readiness** as:

The ability of US military forces to fight and meet the demands of the national military strategy. Readiness is the synthesis of two distinct but interrelated levels. a. unit readiness--The ability to provide capabilities required by the combatant commanders to execute their assigned missions. This is derived from the ability of each unit to deliver the outputs for which it was designed. b. joint readiness--The combatant commander’s ability to integrate and synchronize ready combat and support forces to execute his or her assigned missions.¹¹

Strategic responsiveness requires the readiness to deploy. Personnel, equipment maintenance, and training contribute to this readiness. However, these are not enough. A readiness posture, born of unit mission readiness cycles that provides combatant commanders with units who have

⁷ Field Manual 3-0, *Operations*, (Headquarters Department of the Army, Washington: GPO, June 2001), pgs 3-1 – 3-18. Chapter three is devoted entirely to strategic responsiveness.

⁸ FM 3-0, pg 3-0. Neither JP 1-02 nor FM 101-5-1 provides definitions of this term.

⁹ TRADOC Pamphlet 525-3-0, *The United States Army Objective Force: Operational and Organizational Concept Draft 1*, (U.S. Army Training and Doctrine Command, Fort Monroe, 01 November 01), pg. 12

¹⁰ FM 3-0, pg 3-1.

¹¹ Department of Defense, Joint Publication 1-02, *DOD Dictionary of Military Terms, As amended through 15 October 2001*. [Online], available at <http://www.dtic.mil/doctrine/jel/doddictionary/r/04311.html>. Assessed 01 February 2002.

completed collective training and whose equipment is configured for deployment, imparts the responsiveness today's complex environment demands.¹²

Tied to responsiveness are the Army tenants of agility and versatility.¹³ Field Manual (FM) 3-0 defines **Versatility** as “the ability of Army forces to meet the global, diverse mission requirements of full spectrum operations,” while **Agility** “is the ability to move and adjust quickly and easily.”¹⁴ Whereas both terms denote the ability to adjust to changing situations, versatility describes the inherent capability to perform all missions encompassed within the spectrum of military operations, and agility describes the mental and physical ability to transition forces rapidly, with minimal physical adjustments, from one operation to another and back again.¹⁵ The 1993 version of FM 100-5, *Operations*, uses the analogy of a boxer and decathlete to describe the difference between the two terms. “Versatility is to the decathlete as agility is to the boxer. The decathlete trains for and competes in ten separate events; the boxer, one.”¹⁶ The boxer is a specialist. To win he must quickly transition from defense to offense and back again. Conversely, the decathlete is a generalist. He possesses a broader skill set coupled with the ability to transition those skills between the different events. This understanding is critical because versatility contributes to the Army's strategic responsiveness. It is how a smaller force balances requirements with capabilities.

The last term, Operational Tempo (**OPTEMPO**) is defined in FM 101-5-1 as “the pace of an operation or operations...OPTEMPO includes all the activities a unit is conducting...[and] can be a single activity or a series of operations.”¹⁷ Though normally viewed strictly in terms of the

¹² FM 3-0, 3-2.

¹³ The 1982 version of FM 100-5, *Operations*, contained the first four tenets of Army operations including Agility. Versatility first appeared in the 1993 version of FM 100-5 *Operations*. See James R. McDonough, “Versatility: The Fifth Tenet”, *Military Review: The Professional Journal of the United States Army* 73, no. 12 (December 1993): 11-14.

¹⁴ FM 3-0, 4-16 to 4-18. FM 3-0 is the proponent manual for the definition of these terms.

¹⁵ TRADOC PAM 525-3-0, Draft 1, 12.

¹⁶ Field Manual 100-5, *Operations*, (Headquarters, Department of the Army, Washington: GPO, June 1993): 2-9. Also see McDonough, 14.

¹⁷ Field Manual 101-5-1 *Operational Terms and Graphics*, (Headquarters Department of the Army, Washington: GPO, 1997), 1-115.

number of deployments (deployment load) a unit or soldier conducts, Carl A. Castro and Amy B. Adler note that OPTEMPO includes not only deployments, but also training exercises and garrison duties.¹⁸ This broader understanding fits within the Army's definition and provides a better measure of not only the rate of operations, but also the load. Defining the terms strategic responsiveness, readiness, agility, versatility, and OPTEMPO allows progress onto the study's main body.

¹⁸ Carl A. Castro and Amy B. Alder, "OPTEMPO: Effects on Soldier and Unit Readiness", *Parameters: U.S. Army War College Quarterly* 29, no.3 (Autumn 1999): 86-95. [Online], available at <http://carlisle-www.army.mil/uaswc/parameters/99autumn/castro.htm>. Assessed 17 November 2001. pg 2.

Chapter 2.

Introduction

The purpose of this chapter is two-fold. First, the study of complexity provides a language for understanding the mix of threat and opportunity inherent in any environment and the apparatuses that operate within it. Any changes in this environment are bound to influence the complex adaptive system (CAS). With an understanding of complexity theory, the reader understands the trade offs required to balance the consequences of interactions between a CAS and its environment. The second purpose is that complexity theory provides a construct for analyzing adaptive strategies, which allow systems to survive within a changing environment. In this study, national security policy is the environment in which the military, a CAS operates.

To this end, this chapter begins by contrasting complexity and linear reductionism to gain an understanding of the theory and some of its applicable terms. Next, the chapter explores the notion that the Army is a complex adaptive system (CAS) operating within an environment called national security policy. This understanding imparts a theoretical foundation and provides the relevant cognitive tools for explaining how the Army copes with the affects of a changing environment.

The chapter concludes by presenting a construct - the complexity shuttle - for viewing the interactions within and between complex adaptive systems and their environments. This construct allows exploration of the key intrinsic assumption of the 1993 Bottom-Up Review (BUR) – the requirement to shift forces between national, military commitments. Quickly shifting forces is how the Department of Defense (DOD) seeks to balance capabilities with requirements, suggesting this demands versatile military forces.

Within this construct, the application of Martin Van Creveld's rules for increasing command effectiveness serve as a method for employing adaptive strategies that seek to enhance system survival within a changing environment. In later chapters, Van Creveld's rules will serve

to evaluate proposals designed to narrow the gap between Army requirements and capabilities, ensuring Army relevance (survival) by increasing its strategic responsiveness.

Complexity Theory, Breaking the Tradition of Linear Reductionism

Complexity has existed since the beginning of time.¹⁹ Ancient Chinese, Egyptian, Babylonian and Greek cultures recognized that an uneasy tension between the forces of chaos and order formed a harmony of sorts.²⁰ Yet the general science describing the elements of complexity - the meeting of order and chaos - is relatively new, only receiving widespread study with the advent of super computers.²¹ For western philosophies and science, the theory seeks to explain where linear Newtonian science ends. Unlike Newtonian Physics, complexity or nonlinearity does not seek to describe and ultimately control nature. Complexity theory seeks to demonstrate that at sometime in the life of a system it will pass through the mirror from order to chaos and from chaos to order. Where linearity embraces the “proportionality, additivity, replication, and demonstrability of cause and effect,” complexity “can generate instabilities, discontinuities, synergisms and unpredictability.”²²

The heart of the dilemma between linear and nonlinear systems is how the relationship between a system and its component parts is measured. Breaking a linear system into its component parts, studying those parts in isolation, and rebuilding the original system to explain

¹⁹ Complexity serves as an umbrella for the various terms and concepts within the field. Terms like nonlinearity, deterministic chaos, fractals, self-organizing systems far from thermodynamic equilibrium, self-organizing criticality, cellular automata, solution, etc. all share the property of complexity.

²⁰ John Briggs and F. David Peat, *The Turbulent Mirror*, (New York: Harper & Row, 1989), 19. This book provides an excellent description of complexity by comparing order and chaos as two sides of the same mirror. The reciprocal nature of chaos and order makes them one and the same, depending on how you define and measure a system. Where one sees order, another sees chaos.

²¹ The Santa Fe Institute in New Mexico is the recognized leader in the study of chaos and complexity theory. M. Mitchell Waldrop’s *Complexity: The Emerging Science at the Edge of Order and Chaos*, (New York: Touchstone, 1992), considered a standard for the introduction to complexity, illuminates the work of the Santa Fe Institute. To explain the phenomenon of complexity, Waldrop highlights the trials and tribulations of the institutes leading researchers.

²² Thomas J. Czerwinski, *Coping with the Bounds: Speculations on Nonlinearity in Military Affairs*. (Monograph, National Defense University Press, 1998), Chapter 1, pg 1-2. [Online], available at <http://www.dodccrp.org/>. Accessed, 07 January 2002. Herein cited as Czerwinski, chapter and page.

how it functions is the heart of Newtonian physics and linear reductionism. With linear systems, individual components interact with only one other component at a time. Therefore, predictability exists because if you know a little about the behavior of the components you can observe, statistically validate, replicate, extrapolate, change scales, and make projections with confidence of how the system as a whole will act in the future.²³ This ability to predict and control defined scientific innovation and the resulting technological innovations of the 19th and 20th centuries.

Yet what happens when individual interactions are too small to observe, or produce multiple interactions, or when separating them from other interactions proves impossible? This is the realm of nonlinearity. Nonlinearity or complexity embraces the belief that in living systems, interactions do not exist in isolation of each other nor the environment in which they occur. Complexity exists when interactions are not additive, proportional, and replicable nor can they confidently link cause to effects. The whole of the system does not correspond to the sum of its parts.²⁴ The numerous interactions between complex systems and their environments mean one cannot extrapolate, or predict the future with great certainty. The recent debate over America's vanishing budget surplus provides an excellent example.

In May 2001, the Congressional Budget Office (CBO) projected a ten-year \$5.6 trillion federal budget surplus. From this prediction, many believed there was more than enough for a tax cut, increased domestic spending, and money left over to pay down the national debt, the product of earlier deficit spending.²⁵ The passage of President Bush's \$1.35 trillion tax cut spread over 10 years confirmed this belief. However, by August, the projected surplus slipped to \$3.4 trillion, and the October prediction stood at only \$2.6 trillion.²⁶ Finally, when the Bush administration released its 2003 budget request it concluded that over the next decade there will be a \$665

²³ Ibid, chapter 1, pg 1.

²⁴ Ibid, pg. 2.

²⁵ "Squabbles Over the Stimulus", *The Economist* 361, no. 8243 (13 October 2001): 31

²⁶ "Ibid, see the chart at the bottom of pg 31.

billion surplus.²⁷ Politics aside, how could a surplus of five trillion dollars evaporate in less than nine months?

The reality of the budget surplus prophecy rests upon the foundation of projecting today's international and domestic environments ten years in the future without accounting for change. The interactions between the events of 11 September 2001, a slowing economy, and the new war on terrorism to name a few not only ate into the projected surplus; they now have some predicting the return of long-term deficit spending.²⁸ The linear extrapolations, which produced the mythical budget surplus numbers, could not and did not account for all the effects of changes in the international and domestic environments. This dramatic slide supports Thomas Czerwinski's conclusion, if you know a little about a complex system you do not know a lot.²⁹ This is because "complexity places a premium on flexibility, adaptability, dynamic change, innovation, and responsiveness" consequently, direct cause to effect linkages are rarely discernible.³⁰

Thus, if the science of complexity is imprecise at predicting the future, what good can it serve? According to M. Mitchell Waldrop, an answer lies in understanding that "the essence of the science lies in *explanation*, laying bare the fundamental mechanisms of nature."³¹ It explains the how of an occurrence, but not necessarily the when or the why. Comprehension of the how leads to application of experience to explain likely future outcomes. The science provides the 20/20 of hindsight for use future similar situations.

John Briggs and F. David Peat use the spectacle of earthquakes to demonstrate the explanatory power of the science of complexity. Scientists know earthquakes are the result of the plates of the earth's crust push against each other, but they cannot predict when or where the next

²⁷ "Unfurl the Fuzzy Maths", *The Economist* 362, no. 8259 (9 February 2002): 27.

²⁸ "Ibid. The Bush administration predicts deficit spending through fiscal year 2005.

²⁹ Czerwinski, chapter 1, pg 2.

³⁰ Alan Beyerchen, "Clausewitz, Nonlinearity and the Importance of Imagery" in David Alberts and Thomas J. Czerwinski, eds., *Complexity, Global Politics and National Security*, (Washington: National Defense University, May 1997), 161-162. Cited in Czerwinski *Coping With the Bounds: Speculations on Nonlinearity in Military Affairs*, chapter 1, pg 2.

³¹ Waldrop, Mitchell M., *Complexity: The Emerging Science at the Edge of Order and Chaos*, (New York: Touchstone, 1992), 39. Emphasis in original.

earthquake will occur, nor the magnitude of the energy released. The science demonstrates how pressure builds as the plates move, however it cannot predict with any kind of certainty the *critical* value required to release the built up pressure so that one plate rises above another.³² Thus, past earthquakes provide scientists with a road map, a pattern of activity that helps predict likely outcomes. However, to better comprehend this explanatory power means understanding the related concept of complex adaptive systems.

Complex Adaptive Systems

Grasping the concept of complexity requires understanding that the phenomenon is synonymous with complex adaptive system (CAS). Merriam – Webster’s dictionary defines a system as “a regularly interacting or interdependent group of items forming a unified whole.”³³ However, for complexity this definition is inadequate. M. Mitchell Waldrop provides a three-part definition for a CAS. He refers to a complex adaptive system as a system with “a great many independent agents interacting with each other in a great many ways.” Furthermore, Waldrop notes, “the richness of these interactions allows the system as a whole to *undergo spontaneous self-organization*.” Moreover, “these complex self-organizing systems are *adaptive*...They actively turn what ever happens to their advantage.” Finally, as Waldrop explains, a CAS “possesses a kind of dynamism that makes them qualitatively different from static objects such as computer chips or snowflakes, which are merely complicated.”³⁴ The dynamism Waldrop refers to is the ability to bring order and chaos into a special kind of balance.

Often called “*the edge of chaos*,” this kind of balance is the key to understanding the essence of complexity.³⁵ Waldrop refers to the edge of chaos as “the constantly shifting battle zone between stagnation and anarchy, the one place where a complex system can be spontaneous,

³² Briggs and Peat, 24. Emphasis in the original.

³³ Merriam –Webster’s Collegiate Dictionary, [Online] available at <http://www.m-w.com/cgi-bin/dictionary>. Accessed 28 January 2002.

³⁴ The last four quotes in this paragraph come from Waldrop, 11-12. Emphasis in original

³⁵ Waldrop, 12.

adaptive, and alive.”³⁶ To the far left of this fulcrum is equilibrium and to the far right is chaos.

In chaos or equilibrium, a system cannot survive or grow respectively.

In sum, complex adaptive systems are hierarchal, united by a common aim, and composed of subsystems with niche capabilities. However, a CAS does not exist in isolation. As a living organism, it must function within an environment.

It Gets More Complex

The difference between linearity and nonlinearity (complexity) requires more than just knowing what a CAS is. This examination must also address the language that describes the interaction between a CAS and its environment. Terms like feedback, delay, leverage points, and bifurcation are part of that language. More importantly, this language reveals the critical capability of CAS. In order to adapt to or shape its environment, a CAS must first be able to sense changes in the environment. Additionally, this language provides the construct for the practical application of complexity theory to the Army as a CAS, operating within the environment of the nation’s security policy.

Feedback is the mechanism of recycling. Feedback, defined as the output from one interaction, reabsorbed by the system to create an entirely new output, exists at all levels of living systems.³⁷ Described as either negative - that which regulates further outputs - or positive - that which amplifies or speeds up complementary outputs, feedback is the instrument CAS use to survive.³⁸ The multiplying effect of outputs, which serve as inputs, is how a complex system senses change. Once change is recognized, the CAS either adapts to its environment, or creates the conditions where the environment adapts to the system. Waldrop views feedback as an exclusive phenomenon of CAS.³⁹ Similarly, Briggs and Peat note, feedback “embodies an

³⁶ Ibid.

³⁷ Briggs & Peat, 24-26.

³⁸ Ibid, 26.

³⁹ Waldrop, 36.

essential tension between order and chaos.”⁴⁰ Thus, the ability of complex adaptive systems to spontaneously self organize, to bring order and chaos into a special balance occurs only when feedback is present.

Briggs and Peat illustrate the difference between positive and negative feedback with several examples. The checks and balances of the U.S. constitution are forms of negative feedback designed to regulate the powers of each branch of government. A thermostat is another example. Used to control room temperature, thermostats switch the furnace on by sensing a room temperature below the setting. Likewise, once the temperature rises above the setting, the thermostat shuts the furnace off.⁴¹ Running to escape a threat is an example of positive feedback. Jogging along a street, a runner passes a barking dog. The dog gives chase. With four legs, the dog quickly exceeds the runner’s original pace. In order to avoid a painful bite, the runner increases his pace. The runner’s accelerated speed is an output of his interaction with the dog. Once the threat is gone, the runner then returns to his original pace.

Finally, for a CAS to truly adapt, its feedback can neither be exclusively positive nor negative. Feedback is the constant reabsorption or enfolding of what has come before occurs in all complex adaptive systems.⁴² Balancing the effects of both positive and negative feedback is how a CAS meets the changing nature of its environment.

Delay, closely linked with feedback, is another important concept. It consists of the pause between an output and its regeneration as an input by the system, which creates an entirely new output. In practical terms, delay is the period between a decision and the observable action resulting from that decision.

Understanding delay means locating its origin. In linear systems, the source is easily discernable, allowing one to effortlessly link cause (decision) to its effect (observable action).

⁴⁰ Briggs and Peat, 26.

⁴¹ Ibid, both examples are located on page 25.

⁴² Ibid, 66.

With complex systems, especially those with numerous components or subsystems and several interactions, the blurring of cause and effect occurs. At best, one may be able to determine a casual link, but rarely the Newtonian equation of - if this, then that. This is because in complex systems the numerous interactions hide or spread the origin of delay. Czerwinski labels these hidden interactions, the micro effects recycled by the system. He notes the multiplying of the micro effects generally produces an observable macro effect.⁴³

The problem with delay is many will trace the root of observable effect only to the observable cause. Waldrop uses the simple act of taking a shower to illustrate what happens when one fails to account for delay.⁴⁴ A combination of hot and cold water generally produces a desired shower temperature. If there is a 15-second delay between turning a faucet and feeling the change in temperature, controlling the desired temperature can become a maddening affair. Failing to account for the built in delay, the person turns the faucet some more, because he assumes his first correction was not enough. As the first delay dissipates, the first change in temperature arrives. However, this first change is not the desired temperature so a third adjustment to the faucets is made, before the delay from the second adjustment dissipates. Generally, this switching between too hot and too cold settles down until small changes finally produce the desired temperature. Yet, the process leaves you wondering, was it the last change that produced the desired shower temperature, or the cumulative effect of some or all the previous changes? Failure to study the whole CAS and its environment to locate the hidden micro effects leads to incorrect analysis of the origin of the cause producing the undesirable effect. Thus, without understanding the origin, applying a solution may become a futile effort of trial and error.

The third term, leverage point, is important to the practical application of complexity theory. This term explains the disproportional nature that small changes have in complex adaptive systems. Because of feedback and delay, a small change can have a catastrophic effect.

⁴³ Czerwinski, chapter 1, pg 5.

⁴⁴ Waldrop, 25.

Returning to the earthquake example, the last, small movement of the tectonic plates “causes” the release of energy in the form of violent shaking. Damage to man made structures is perceived as the result of the observable shaking of the earth. In reality, the cause is the imperceptible movements of the tectonic plates over time that culminates in a final shift, which releases the built-up pressure leading to the observable shaking of the ground.

If small changes can produce disproportional results, then it is possible to apply small changes to a CAS or to the environment in order to produce a sizeable resolution. The crucial skill required to apply this concept is “insight, the ability to see connections” and the interactions of those connections.⁴⁵ With insight, one can see the leverage points, as well as the linkages that point to likely outcomes. Said differently, insight anticipates results that a change will have on a series of connections.⁴⁶

The last term needed to apply complexity to the world of national security and the Army’s role within that system, is bifurcation. Essentially, a bifurcation represents choices for adaptation based upon a number of interactions. Metaphorically, Thomas Czerwinski describes a bifurcation as “a fork in the road, or a branch representing choices, possibilities, or paths.”⁴⁷ Feedback and delay play important roles in determining a bifurcation, even illuminating potential leverage points.

In interacting with its environment, a system produces more than one bifurcation, each presenting the system with increasingly more choices. For instance, the first bifurcation point generates two alternatives representing the boundary between equilibrium and complexity. Each new bifurcation produces more choices. Succeeding bifurcation points produce multiple paths, moving the CAS through the zone of complexity on into chaos. Simplistically, the second

⁴⁵ Ibid, 21.

⁴⁶ Gary Klein, *Sources of Power: How People Make Decisions*, (Cambridge, MA: The Massachusetts Institute of Technology Press, 1998), 45. Klein uses the mental simulation, which is the ability to imagine objects and consciously move those objects through several interactions, finally picturing them in a different way than at the start.

⁴⁷ Czerwinski, chapter 3, pg 2.

bifurcation generates four, the third, eight, while the fourth generates sixteen choices.

Furthermore, each new bifurcation occurs at an interval, which is approximately one-fifth as long as the preceding point, creating a compression effect.⁴⁸ Thus, more bifurcations mean multiple choices, while the time interval between these choices becomes increasingly shorter. These two factors come together at the fourth bifurcation representing the edge of chaos, “the turbulence encountered in which the average mind will turn to mush” by trying to contemplate the many choices available within a very limited amount of time.⁴⁹

Putting It all Together, the Complexity Shuttle

Thomas Czerwinski uses the Period-Doubling Cascade model as a method of visualizing complexity – the competition between several CAS and their shared environment.⁵⁰ Liking the diagram to a football field, Czerwinski goes on to explain how complex adaptive systems interact with their environments.⁵¹ Equilibrium and chaos represent opposite end zones, while complexity serves as the field of play, divided by the four bifurcation points. To the left is the equilibrium end zone, a region so stable and with so much order that progress, growth and innovation are stifled. To the right of complexity the opposite exists, the chaos end zone, characterized by turbulence so severe that understanding and intervention become impossible.⁵² As noted earlier, neither equilibrium nor chaos is suitable for CAS survival.

To complete the analogy, the field requires teams. Czerwinski offers his seven attributes of CAS as players who comprise opposing teams on the field of complexity.⁵³ The object of the game is to push the opposing CAS into either end zone while your CAS remains on the field of

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ For a more detailed explanation of Period-Doubling Cascade models, see Briggs and Peat, *Turbulent Mirror*, 53-65.

⁵¹ Czerwinski, chapter 3, pg 1-4 explains the football metaphor.

⁵² Ibid, 1-2.

⁵³ See Czerwinski, chapter 1, page 3 where he breaks his seven attributes into the four properties of aggregation, nonlinearity, flows and diversity and the three mechanisms of tagging, internal models, and building blocks.

play. As long as your CAS is moving back and forth in the region of complexity - “coping with the bounds” - and avoiding the end zones you are surviving.⁵⁴ Figure 2.1 depicts the Period-Doubling Cascade.⁵⁵

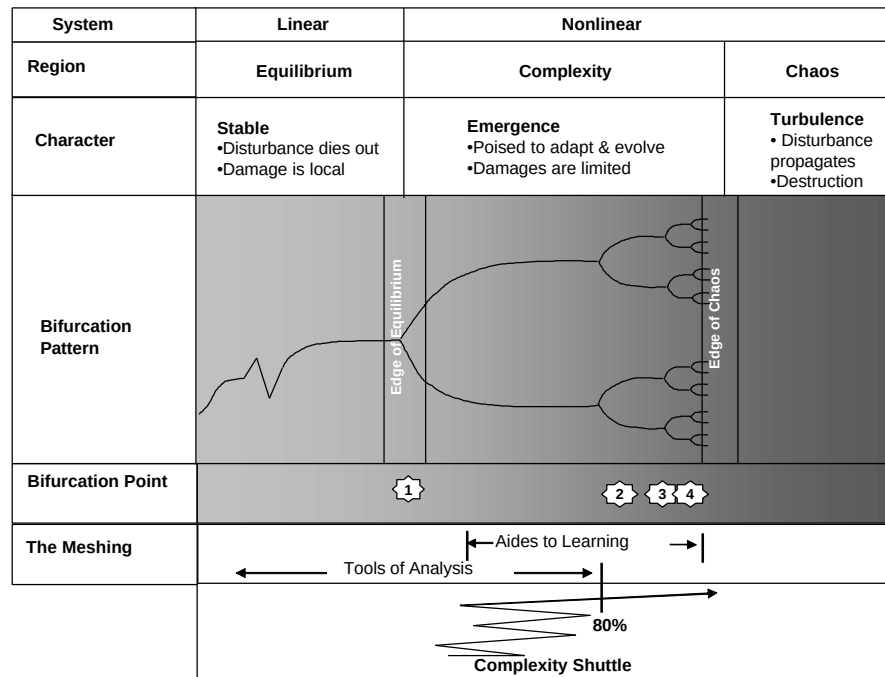


Figure 2.1 The Period Doubling Cascade

A CAS shuttles between the suffocating world of equilibrium and the incomprehensible world of chaos with the edges of each serving as the boundaries. A bifurcation path equals a play. The complex adaptive system senses its environment, primarily using feedback, and then adapts to the environment or shapes the environment to its liking. The chosen path does not represent the optimal solution for survival, because the object is not the perfect answer but a satisfactory one - one that is good enough to ensure survival by keeping the system within the

⁵⁴ Ibid, 1-3.

⁵⁵ Ibid, 1.

bounds of equilibrium and chaos.⁵⁶ However, the direction of adaptation can be either toward equilibrium or toward chaos. When viewed over time, this shifting left or right appears as shuttling, hence the term complexity shuttle. Furthermore, an adaptation based upon the first bifurcation point is not worth as much as one made at the fourth point. Czerwinski, like Waldrop, recognized that complex adaptive systems thrive best at the edge of chaos.⁵⁷ Therefore, the trick to survival balances the threat of falling off the edge into chaos with the survival opportunity achieved by pushing a competing CAS into either equilibrium or chaos. Czerwinski goes further, by offering the enmeshing of two mechanisms to explain the complexity shuttle.

A Way to Operate in Complexity

Tools of analysis and aides to learning represent linear and nonlinear strategies for examining the complexity shuttle. Referring to figure 2.1, one sees the linear tools of analysis help predict the shuttle of mildly complex systems, whereas aides to learning are suited for increasing complex systems, those that reside between the second and fourth bifurcation. The balancing point of the two strategies, located just beyond the second bifurcation is the notion of the 80/20 rule. Typically, the first part of a project is relatively easy, yet over time, the work becomes increasingly difficult. Twenty percent of the effort achieves eighty percent of the result.⁵⁸ However, to achieve the remaining fifth of the optimal solution requires an effort four times greater than the initial investment.

Tools of analysis assist in breaking large CAS into smaller manageable systems. Using aides to learning, the interactions of these subsystems can explain likely outcomes that satisfy the requirement for the system to survive. Czerwinski's monograph offers six aides to learning, yet

⁵⁶ Czerwinski, chapter 3, pg 7. Klein, 30. Klein calls the answer "the first workable option."

⁵⁷ Czerwinski, chapter 3, pg 3; Waldrop, 12.

⁵⁸ Czerwinski, chapter 4, pg 1.

because he notes that metaphor and Van Creveld's Rules "are the more advanced Aides to Learning that the nonlinearist has available to work with," this study focuses on just these.⁵⁹

Audience experience limits the nonlinear explanatory power of metaphors. First, in order for the metaphor to convey understanding, the recipient must have had a previous experience with the phrase used to replace the ill-defined complex subject. Additionally, because understanding the visual image produced by a metaphor relies on previous experience, "metaphors are open to novelty, surprise, innovation, and even mutation."⁶⁰ As a person gains experience with the subject he is trying to define, the metaphors used to convey understanding become increasingly more sophisticated, more precise in describing the complex phenomena. The mutation or evolution of a metaphor is a form of feedback, adding new knowledge to the field.

While metaphors largely assist in describing what is happening between a CAS and its environment, Van Creveld's Rules, the second aid to learning, provide a way to operate in complexity, a mechanism for a CAS to adapt to or shape its environment. Together with metaphors, Van Creveld's rules aid one in keeping a CAS within complexity.

Martin Van Creveld's seminal work, *Command in War* is a series of case studies designed to uncover the essence of command in war – reducing uncertainty. With this understanding, Van Creveld points out that when:

[c]onfronted with a task, and having less information available than is needed to perform that task, an organization may react in either of two ways. One is to increase its information-processing capacity, the other is to design the organization, and indeed the task itself, in such a way as to enable it to operate on the basis of less information. These approaches are exhaustive; no others are conceivable. A failure to adopt one or the other will automatically result in a drop in the level of performance.⁶¹

⁵⁹ Ibid. chapter 5, pg 3. Czerwinski devotes a chapter to each of the remaining four aides to learning: Perrow's Quadrant (chapter 7), Systems Dynamics (chapter 8), Genetic Algorithms (chapter 9), and Pattern Recognition (chapter 10), Metaphors (Chapter 5).

⁶⁰ Ibid, chapter 5, pg 2.

⁶¹ Martin Van Creveld, *Command in War*, (Cambridge Massachusetts: Harvard University Press, 1985), pg 269. Cited in Czerwinski's *Coping with the Bounds: Speculations on Nonlinearity in military affairs*, chapter 6, pgs 1-2.

He goes on to say that an improvement in command performance is “by definition associated with a greater demand for information,” and offers three options (which Czerwinski calls rules):⁶²

- 1) Enhance the organization’s capacity for information processing... [which] will lead to the multiplication of communication channels (vertical, horizontal or both) and to an increase in the size and complexity of the central directing organ.
- 2) [A] drastic simplification of the organization so as to enable it to operate with less information (the Greek phalanx, and Frederick the Great’s robots).
- 3) [A] division of the task into various parts and to the establishment of forces capable of dealing with each of these parts separately on a semi-independent basis.⁶³

Van Creveld goes on to reiterate the central theme of his study, that when seeking to reduce uncertainty, the first two options “are inadequate and stand in danger of becoming self-defeating, [while] the third one will probably remain superior to them in virtually every case.”⁶⁴

Thomas Czerwinski, a firm believer in the use of Van Creveld’s organizational options when seeking to accomplish a mission with limited information, expands upon Van Creveld’s work by associating types of command with each rule.⁶⁵ Additionally, he provides modern examples of organizations employing Van Creveld’s original rules. Czerwinski terms first rule organizations as command by direction, which operates by prioritizing information. He offers the Army’s digitized Force XXI as a current incarnation of this, the oldest form of command. The second type of command subscribes to Van Creveld’s second rule, command by plan. These organizations seek to centralize uncertainty “by trading flexibility for focus in order to concentrate on identifying and neutralizing centers of gravity, or target sets, in the campaign context.”⁶⁶ Evolving over the last 250 years, this centralized form of command is the norm for modern military forces. Current incarnations include the Air Forces’ Air Tasking Order (ATO),

⁶² Ibid, Czerwinski, chapter 6, pg 1.

⁶³ Ibid.

⁶⁴ Van Creveld, 269.

⁶⁵ This paragraph paraphrases pages 1 – 4 of Thomas Czerwinski, “Command and Control at the Crossroads,” *Parameters: US Army War College Quarterly* 26, no. 3 (Autumn 1996), 121-132. Reprinted as appendix 4 to Czerwinski’s *Coping With the Bounds: Speculations on Nonlinearity in Military Affairs*, appendix 4,

⁶⁶ Ibid, 3.

and the Army's targeting process. The third and final type of command is command by influence. This type seeks to distribute uncertainty by dividing the task so that subordinate forces can operate with increasing certainty, thereby reducing the overall uncertainty experienced by the organization as a whole. Commander's intent and mission type orders serve as examples of command by influence.

This ability to operate with uncertainty, instead of attempting to control it, serves as the strength for applying Van Creveld's third rule to the notion of complexity shuttle. Dividing the task and thus distributing the inherent uncertainty complements the spontaneous self-organizing nature of complex adaptive systems. Feedback allows the CAS to sense changes in the environment. Similarly, metaphors serve as guides through the uncertainty of change. Their strength is using past experience to cope with the inherent uncertainty of new or modified tasks. The larger organization's aim, its overarching purpose, then serves to modulate any adaptation by the CAS.

Thus, a method that distributes uncertainty allows a system to move along the shuttle, adapting to the environment, or shaping that environment to suit its needs. If the method allows successful negotiation of the complexity shuttle, the system is not only surviving, but also by shaping the environment to its needs; it may in fact be growing. Simply put, the system is operating within the bounds of complexity.

Summary

Linearity is excellent for describing systems that behave predictably. However, the Army is not a linear system. The interactions, both internal and external to the national security environment produces a wholeness that linear reductionism cannot explain. Therefore if linear reductionism cannot fully explain what is happening, it has little use for predicting the future impact of past, present, or future decisions. Conversely, the strength of complexity theory is its power to display connections between a CAS and its environment. Yet because this only reveals

potential outcomes, it also has a limited predictive capability. Another solution lies in a combination of linear and nonlinear study.

Czerwinski offers that combinations of linear “tools of analysis” and nonlinear “aids to learning” are required to study complex adaptive systems.⁶⁷ Primarily, tools of analysis assist in examining mildly complex systems, or the interactions that occur between the edge of equilibrium and the second bifurcation, whereas aides to learning are required to examine the possible outcomes of interactions that occur between the second and fourth bifurcation points.

This study of complexity provides the language and construct for the next chapter’s look at the impact of a changed security environment on the CAS that is the Army. Furthermore, use of Van Creveld’s Rules as an aid to learning reappears in chapter four to assist in the analysis of alternatives that permit the Army to adapt or shape its environment. Finally, a separate use of Van Creveld’s third rule in chapter five assists in producing a workable option for Army adaptation to the new security environment.

⁶⁷ Czerwinski, chapter 4, 1.

Chapter 3.

Introduction

The close of the 20th century found the Army feeling like a recently dethroned World champion baseball team. It displayed awesome power, and seemed to be at the height of its game when a seemingly insignificant shooting war in Kosovo proved more than the Army could manage in conjunction with its existing requirements. What contributed to the Army's downfall? Was it a change in the environment, the rules of the game, complacency, all or some of the above? This chapter explores what changed and how this change affected Army requirements and missions. Furthermore, this chapter investigates the Army's increasing gap between capabilities and its Title 10 requirement to fight and win the nation's wars. It concludes that Operation Allied Force demonstrated the widening of the gap between this requirement and Army capabilities, the event that moved the Army from complexity to chaos.

The Transformation of National Security Policy

"Having inherited the defense posture that won the Cold War and Desert Storm, the Clinton administration intends to leave as its legacy a defense strategy, military force and support structure that have been transformed to meet the different challenges of this new security era."⁶⁸ Secretary of Defense Cohen's remarks, made in early 1998, accurately summed up the aggregate effort of the first five years of the Clinton administration. This focus led the Chairman of the Joint Chiefs of Staff (CJCS) to comment nearly three years later: "today, we face the dilemma of

⁶⁸ William S. Cohen, "Prepared Statement of Secretary of Defense to the Senate Armed Services Committee, Feb. 3, 1998," *Defense Issues— New Defense Strategy: Shape, Respond, Prepare*, 13, no.13, 1. [Online], Available at <http://www.defenselink.mil/speeches/1998/di1313.html>. Accessed 22 October 2001.

plenty of strategy, not enough forces.”⁶⁹ How could the CJCS conclude that the administration had not or would not achieve its stated goal? This section examines both national and military security policy development and execution with the purpose of exploring the root causes of this requirement versus capability dilemma.⁷⁰

Since passage of The Goldwater-Nichols Defense Department Reorganization Act of 1986, a congressional requirement exists for the President to publish an annual report detailing the nation’s National Security Strategy (NSS).⁷¹ The NSS is a conceptual document - broad in nature - that fulfils numerous purposes. Beginning with the administration’s vision of the world, the document articulates an approach to maintain or achieve this vision – the ends. By identifying national interests and threats to those interests, the President then determines the objectives - the way - required to respond to those threats.⁷² It also communicates some of the dilemmas, tradeoffs and risks associated with the selected method. Finally, the NSS integrates the nation’s means, its diplomatic, informational, military and economic elements of national power to achieve its goals.

In the fifteen years since passage of the Defense Department Reorganization Act of 1986, three different Presidents have published twelve National Security Strategies.⁷³ Though the

⁶⁹ Jim Garamone, “Shelton Warns of Strategy-Resource Imbalance,” *American Forces Information Service*, page 1. [Online], Available at http://www.defenselink.mil/news/Dec2000/n12152000_200012156.html. Accessed 22 October 2001.

⁷⁰ Amos A. Jordan, William J. Taylor, Jr. and Michael J. Mazarr, *American National Security*, 5th Ed., (Baltimore: Johns Hopkins University Press, 1999). See pgs 64-89 for a succinct review of the evolution of national security policy from the close of World War II through the Clinton administration. Additionally, on pgs 64-65, the authors define the concept of national security policy by citing Samuel P. Huntington, *The Common Defense*, (New York: Columbia University Press, 1961), 3-4. National Security Policy comprises both strategic and structural policies [that] exists in two worlds; any major decision about it influences and is influenced by both international and domestic politics. Strategic decisions are made largely in response to perceived threats in the international environment, they deal primarily with commitments, deployments, and employment of military forces, and the readiness and development of military capabilities. Structural decisions are made mostly in terms of domestic politics and deal primarily with budget and force decisions on defense personnel, materiel, and organization.

⁷¹ Each report is submitted in accordance with Section 603 of the act.

⁷² The White House, “National Security Strategy of the United States,” (Washington, GPO, January 1993), 3. Here in cited s NSS and date. Also see NSS, January 1988, 1.

⁷³ President Reagan 2, President Bush 3, and President Clinton 7. The current administration has yet to publish its first NSS.

wording may change, the strategic vision in each document is remarkably similar.⁷⁴ However, the ways and means used to achieve or maintain the ends have evolved with changes in the international and domestic environments, as well as successive presidential administrations. For the military, these changes are captured in three National Military Strategies (NMS), the 1993 Bottom-Up Review (BUR), and two Quadrennial Defense Reviews (QDR).⁷⁵

After publication of the NSS, leaders of the nation's instruments of power formulate strategies designed to apply their means to achieve the stated ends. By "implementing the defense agenda of the NSS and the Secretary of Defense policies spelled out in the Defense Planning Guidance (DPG)," the National Military Strategy (NMS) converts broad guidance into military objectives.⁷⁶ Required by law, the CJCS, in consultations with the unified and specified commander in chiefs (CINCs) and members of the Joint Chiefs of Staff, produces the NMS.⁷⁷ The completed document fulfills the responsibility of assisting the President and Secretary of Defense in providing strategic direction for the Armed Services. Moreover, the document identifies the force structure required to accomplish the military's portion of the NSS. Theoretically, this is how America develops a strategy for protecting its national interests. As shown below, practice and theory are somewhat different.

President Bush's August 1991 NSS represented an evolution in the nation's security strategy. However, the opportunity "to build a new international system in accordance with America's values and ideas" encountered challenges from the domestic and international environments.⁷⁸ America's ongoing economic recession, partly a product of the military buildup

⁷⁴ The Strategic Vision encompasses three goals 1) enhance America's Security, 2) a healthy and growing U.S. economy, and 3) promote democracy, the rule of law, and human rights abroad.

⁷⁵ Powell's 1992 NMS, Shalikashvili's 1995 and 1997 NMSs. QDRs were published in 1997 and 2001.

⁷⁶ The DPG, issued by the Secretary of Defense, provides firm guidance in the form of goals, priorities, and objectives, including fiscal constraints, for the development of the Program Objective Memorandums by the Military Departments and Defense agencies. Colin L. Powell, "The National Military Strategy, 1992," (Washington: GPO, 1992), preface.

⁷⁷ Section 153, a (1) of the Goldwater-Nichols Defense Department Reorganization Act of 1986.

⁷⁸ NSS, August 1991, v.

that defeated Communism, demanded attention. Additionally, the demise of the Soviet Union meant that the old strategy of containing global communism through flexible response and deterrence was ill suited for an uncertain new world order.⁷⁹ Balancing these challenges against the opportunities created is the essence of strategy.

Essentially, President Bush expressed a new way to achieve security in a new era. Politically, the method involved shifting from unilateral actions designed to defend national interests, to *promoting* national interests through alliances and stronger international organizations like the United Nations.⁸⁰ No longer would America react to the international environment. She would shape the complex international environment to enhance her survival. America would lead, but the burden of building and maintaining a new international order required sharing, and this became a focus of foreign policy.

Militarily, increasing demands on the domestic resources required to preserve the other elements of national power demanded a smaller, restructured Armed Force.⁸¹ Based upon this, the 1992 NMS reflected the evolution in the role of the military in executing its portion of America's security policy. No longer would America emphasize its strategic nuclear forces and large conventional capabilities. Moreover, the NMS specified a force "flexible enough to adapt to the changing circumstances while preserving those core capabilities so necessary to deter and defend."⁸² Some twenty-five percent smaller than during the height of the Cold War, a "Base Force" containing Pacific, Atlantic, Contingency, and Strategic Forces would accomplish post Cold War military objectives. This smaller force with regional as well as global orientations, requiring the "strategic agility" to transition between the two, would lead the building of a new

⁷⁹ NSS, January 1988, 13. Beginning in 1961, flexible response served as the foundation of America's security strategy.

⁸⁰ NSS, August 1991, 13, emphasis added.

⁸¹ NSS, August 1991, 31.

⁸² Ibid, 17.

world order.⁸³ The Army's portion envisioned twelve active divisions, six National Guard divisions, and two cadre divisions.⁸⁴

In late 1992, while America prepared herself for a new president, the incumbent drafted his final NSS. Published just before the inauguration, President Bush acknowledged, "the United States no longer burdened with the enormous military requirements of global containment" was staring at "an unprecedented opportunity to promote our interests rather than defend them, to address simultaneously our domestic needs, and indeed to shape our future both at home and abroad."⁸⁵ Thus, as President Bush passed the mantle of leadership to President Clinton he also issued the nation a challenge. In comparing America's state of affairs to that at the end of World War II, President Bush said "we have a choice to make, lead the world into this historic of transformations, or ... choose ... to turn inward, abandon our leadership role, and accept whatever results may follow."⁸⁶

President Clinton accepted this challenge. He inherited a military in the midst of drawing down to meet the minimum "Base Force," while simultaneously promoting U. S. interests through commitment to smaller-scale contingency (SSC) deterrent missions in southwest Asia, the Adriatic Sea, and Somalia.⁸⁷ However, President Clinton did not fully embrace the current NSS. Believing that the line between domestic and foreign policies was disappearing, President

⁸³ Powell, 9 introduces the concept of strategic agility as "US forces stationed in CONUS and overseas will be fully capable of worldwide employment on short notice."

⁸⁴ Ibid, 19. A cadre division is the division's leadership minus troops. Designed to reconstitute the Army in case of global war, NCOs and troops fresh out of basic training would join the reserve officer leadership of an Exercise Division to become a division ready for employment.

⁸⁵ NSS, January 1993, 2.

⁸⁶ Ibid, i.

⁸⁷ United States Military Operations [Online], available at <http://www.fas.org/man/dod-101/ops/index.html>. Internet, accessed January 16, 2002. Southwest Asia operations began with the conclusion of Operation Desert Storm in 1991. These included Operation Provide Comfort, (airlift supplies for Kurds in northern Iraq), Provide Comfort II (the protection of supply airlifts, which later became Operation Northern Watch), Southern Watch (southern Iraq no fly zone enforcement), and Desert Falcon (HIMAD and SHORAD Air Defense protection for the Kingdom of Saudi Arabia). Operation Restore Hope began in 1992 and involved the commitment of US troops to protect UN sponsored famine relief workers in Somalia. Operation Maritime Guard began in November 1992 to enforce UN embargoes in the former Yugoslavia, by patrolling the seas off the coast of Montenegro.

Clinton set down the strategic vision for his administration's national security policy. The nation "must revitalize its economy if we are to sustain our military forces, foreign initiatives and global influence, and that we must engage actively abroad if we are to open foreign markets and create jobs for our people."⁸⁸ President Clinton's message was clear, deterrence by other means. The primacy of deterrence through forward deployed armed forces was gone. A robust economy would become the pillar defining America's national security policy.⁸⁹ Therefore, peacetime engagement supported by power projection was the method envisioned for maintaining an international order friendly to America's economy.

The authors of the *American National Security, 5th edition*, note that the strategic and structural decisions that comprise security policy interact at all levels of the domestic and international environment. "Strategic decisions determine the force structures required to implement them, yet the resources made available through structural decisions limit the extent to which strategic decisions can be made."⁹⁰ Clearly, this interaction is not only reciprocal in nature; it also serves as a form of feedback. In a constrained environment, each regulates the activities of the other. In order to realize a security policy that sought to balance the competing requirements of the international and domestic environments, President Clinton called for a bottom up review of both national security and military strategies. His econocentric guidance, based upon the interconnectedness of the world, shaped the balance between the elements of national power. Equally, this guidance formed the foundation for reviewing the military means and ways necessary to implement said policy.

⁸⁸ NSS of Engagement and Enlargement, July 1994, i. Though this philosophy was not codified until the 1994 NSS, it captures the essence of President Clinton's view on security. This belief served as Presidential guidance during the Bottom-Up Review. Of note, word for word this assumption is found in President Clinton's preface to the 1994, 1995, and 1996 NSSs.

⁸⁹ Michael T. Klare, *Resource Wars* (New York, Henry Holt, 2001), pg 7. Klare's believes future wars will be fought over access to, exploration, and shipment of the resources needed to fuel economies. He concludes, Clinton's econocentric security policy is nothing more than a return "to the status quo ante – a strategic environment that prevailed before the Cold War."

⁹⁰ Jordan, Taylor, and Mazarr, 65. Also see note 70.

A New National Military Strategy to Meet a Changing Security Strategy

Initiated in February 1993, the Bottom-Up Review examined defense modernization, infrastructure, foundations, and resources with the purpose of developing a force structure and strategy matching the President's objective of reducing defense budgets by \$104 billion.⁹¹ The Department of Defense (DOD) completed its work in October 1993 and was able to report the new force structure would save \$91 billion during fiscal years (FY) 1995 – 1999. The cornerstone of the report was a worst-case scenario, requiring a force structure capable of fighting and winning two nearly simultaneous major theater wars (MTW).⁹² A departure from the theoretically and hierarchical model to be sure, the BUR built a resource constrained force structure first; then the military strategy to achieve broad security goals.⁹³ The President's strategic decision to build a structure to a predetermined financial cap was bound to effect the strategy the force was capable of accomplishing.

Subsequently refined with the 1995 and 1997 NMSs, the BUR embraced a strategy along three basic lines. First, prevent threats from emerging, next, deter those that do emerge, and finally if prevention and deterrence fail, defeat the threat using military force.⁹⁴ For the Armed Forces, these principles translated into the objectives of *Shape*, *Respond*, and *Prepare Now*.⁹⁵ These objectives were further refined into three missions: shape the international environment through forward presence, later dictated by regional theater engagement plans (prevent and deter objectives), respond to the full spectrum of potential crises (respond objective), and transform the

⁹¹ Richard Davis, "Bottom-Up Review: Analysis of Key DOD Assumptions", United States General Accounting Office (GAO), National Security and International Affairs Division, (Washington, 31 January 1995), GOA/NSIAD 95-56, pg. 3, 16.

⁹² Les Aspin, "*Report on the Bottom-Up Review*," (Washington: GPO, October 1993), 7-8. See Also NSS, 1994, pg. 5.

⁹³ James Jay Carafano, "Selling Landpower," *Army* 48, no. 3 (March 1998): 15-22. Carafano provides a succinct review of the Army's post World War II effort at justifying its existence. He concludes linking structure to the nation's security strategy is the only effective method of justifying force structure.

⁹⁴ Jordan, Taylor, and Mazarr, 88.

⁹⁵ John M. Shalikashvili, "{*Shape, Respond, Prepare Now: A Military Strategy for a New Era*," (Washington: GPO, 1997), preface. Emphasis added.

force to meet an uncertain future (prepare objective).⁹⁶ However, regardless of the strategy packaging, the Army's fundamental requirement remained to fight and the nation's wars.

This military strategy, while generally in agreement with the 1992 NMS, contained important refinements. First, General Powell's NMS never called for a capability to execute two nearly simultaneous regional conflicts. Therefore, when it apportioned forces as Atlantic, Pacific, or Contingency, a measure of stability ensued. Subordinate elements could focus their training on a likely region and specific war plans. This stability and training focus was crucial when viewed in the context of increasingly limited resources. Second, while recognizing future changes in the strategic environment might require a reshaping of the Base Force, it laid down the minimum essential force and capabilities required to achieve both global and regional military objectives.⁹⁷

Whereas the 1993 BUR acknowledged that the Base Force provided America with the capability to fight two MTWs and conduct other concurrent operations, it still recommended reductions in force structure to achieve the expected Cold War peace dividend.⁹⁸ In meeting the requirements of two simultaneous MTWs, DOD apportioned a near identical force structure to fight Northeast and Southwest Asia MTWs.⁹⁹ For the regional CINCs and the Army, this meant

⁹⁶ Ibid, 15-16. For a description of the evolution Theater Engagement Plans (TEP) and how they work see Ralph R. Streinke and Brian L. Tarbet "Theater Engagement Plans: A Strategic Tool or a Waste of Time?" *Parameters US Army War College Quarterly* 30, no.1 (Spring 2000): 69-81. [Online], available at <http://carlisle-www.army.mil/usawc/parameters/00spring.htm>. Accessed 09 November 2001. The authors conclude because the bureaucratic process only involves the military instrument of national power, it fails to integrate all elements of national power in a truly region approach to shaping the international environment.

⁹⁷ Powell, 18, and the August 1991 NSS, 31

⁹⁸ Mark E. Vinson, "Structuring the Army for Full-Spectrum Readiness," *Parameters US Army War College Quarterly* 30, no. 2 (Summer 2000): 19-32. [Online], Available at <http://carlisle-www.army.mil/usawc/parameters/00summer/vinson.htm>. Accessed 17 October 2001. On page 3 of the internet copy of this article, Vinson notes the Army lost two active divisions. Herein page citations will come the internet copy of this article.

⁹⁹ Field Manual 3-0, *Operations*, 2-9 comments "apportioned forces and resources are those made available for deliberate planning as of a certain date. They may include assigned, those expected through mobilization, and those programmed.

five divisions for each conflict.¹⁰⁰ Robert Haffa notes with some frustration how DOD's shallow analysis failed to account for differences in enemy forces, terrain, and allied capabilities and what affect this would have on not only the number, but also the types of forces required to win in either conflict. For instance, he notes South Korea's large ground forces, combined with forward based US Air power could halt a North Korean invasion. This fact allows a smaller US ground force than currently envisioned in the land power centric war games to launch the counteroffensive that defeats North Korea.¹⁰¹

Thus, the Bottom-Up Review concluded while the new military strategy allowed "us to carry forward with confidence our strategy of being able to fight and win two major regional conflicts nearly simultaneously...it leaves little other active force structure to provide for overseas presence or to conduct peacekeeping or other lower-intensity operations if we had to fight two MTWs at once."¹⁰² In cutting Army force structure by two divisions, DOD *knowingly* created an ends versus means dilemma. Now, the Army was faced with the requirement of conducting engagement missions with the same forces obligated to execute the two MTW missions.¹⁰³

Understanding there was no separation between contingency and MTW forces, the effort to offset the associated risks of an inadequate force structure for the strategy included five critical assumptions.

- Forces committed to peacetime engagement missions could quickly disengage, becoming available for their MTW mission.
- The shifting of specialized forces from one conflict to another could occur.
- Third, sufficient strategic lift, prepositioned equipment, and support forces were available to reduce the time required to transition from deterrence to war.
- The National Guard enhanced brigades would be available for employment within ninety days of activation.

¹⁰⁰ Robert P. Haffa, "Planning US Forces to Fight Two Wars: Right Number, Wrong Forces", *Strategic Review* 27, no.1 (Winter 1999), 18.

¹⁰¹ Ibid, 19. Though an advocate of Airpower at the expense of Land power, Haffa's analysis is sound.

¹⁰² Les Aspin, "Report on the Bottom-Up Review," (Washington: GPO, October 1993), 7-8, quoted in Vinson, 3.

¹⁰³ Vinson, 3, emphasis added.

- Finally, a series of enhancements in strategic mobility, firepower, and intelligence collection were critical for this new strategy to work.¹⁰⁴

Clearly, the validity of the first two assumptions relies upon versatile military forces. The execution of this military strategy would test the validity of these and other BUR assumptions.¹⁰⁵

MTW vs. SSC: Competing or Complementary Paradigms?

A review of US military operations during the past 200 years reveals that while the nation does fight wars, it conducts far more military operations other than war (MOOTW), or what Allan R. Millet terms “limited contingency operations” (LCO).¹⁰⁶ During the past decade, the growing number of these LCOs, also called smaller-scale contingencies (SSC), competed against the Army’s requirement to fight and win the nation’s wars. Today, winning the nation’s wars is generally viewed from the perspective of a capability to fight and win two nearly simultaneous major theater wars (MTW). However, some have noted Army doctrine and organizational design seeks to optimize its war fighting responsibilities at the expense of its rediscovered requirement to shape the international environment.¹⁰⁷

According to Michael O’Hanlon “[T]he ability to handle overlapping crises in two or more locations is indeed a sound strategic pillar on which to base U.S. forces.”¹⁰⁸ However,

¹⁰⁴ Davis, 5.

¹⁰⁵ Ibid. The GAO report focuses on disproving the validity of the BUR assumptions, leaving the reader to conclude that if the assumptions are wrong then America’s military strategy and force structure must also be wrong.

¹⁰⁶ Allen R. Millet, “The Parameters of Peacekeeping: US interventions Abroad, 1798-1999,” *Strategic Review* 28, no. 2 (Spring 2000), 29-30.

¹⁰⁷ For example see Alan D. Zimm, “Desert Storm, Kosovo, and Doctrinal Schizophrenia,” *Strategic Review* 28, no. 1 (Winter 2000): 32-39. Robert P. Haffa Jr., “Planning US Forces to Fight Two Wars: Right Number, Wrong Forces,” *Strategic Review* 27, no. 1 (Winter 1999): 15-21. Michael E. O’Hanlon, “Rethinking Two War Strategies,” *Joint Forces Quarterly* 24 (Spring 2000): 11. David Jablonsky, “Army Transformation: A tale of Two Doctrines,” *Parameters US Army War College Quarterly* 31, no.3 (Autumn 2001): 43-62. [Online], available at <http://carlisle-www.army.mil/usawc/Parameters/01autumn/Jablonsk.htm>. Accessed, 19 November 2001.

¹⁰⁸ O’Hanlon, 12. Also see page 21 of the 2001 QDR. This report continues to embrace the Clinton administration’s two MTW strategy, stating “U.S. forces will remain capable of swiftly defeating attacks against U.S. allies and friends in any two theaters of operations in overlapping timeframes. The words may be different, but the message is clear, a two MTW strategy will continue to shape America’s military force structure

having the capability to execute both MTWs and SSCs is one thing, being required to execute both presents its problems. Each new requirement competes for resources. Thus, increasing requirements actually reduces capabilities, because as forces are committed to an SSC or an MTW, the Army as a whole loses the capability to execute new missions. Therefore, a gap between capabilities and requirements will always exist. However, keeping this gap as narrow as possible requires an understanding of the differences between MTWs and SSCs.

Essentially, SSCs encompass all military activities short of an actual recognized MTW.¹⁰⁹ Additionally, they tend to be open-ended missions that shape the international environment by either preventing the start of, or deterring the escalation of MTWs.¹¹⁰ While traditional conflicts prescribe the regional nature of potential MTWs, today's uncertain international environment means SSCs could occur anywhere. Moreover, the nature of many SSCs demand an entirely different skill set than standard war fighting. The Army's answer to these differences is to develop the capability for all Army forces to operate across the full spectrum of operations. However, given the fact that fewer available forces and more missions translates into less training time, commanders face a dilemma. Namely, on which skill set should their unit focus its limited training resources? Field Manual 3-0 does not help when it says, "unless directed otherwise, division and lower-level commanders develop battle focused Mission Essential Task Lists (METL). When corps and higher-level commanders anticipate a stability mission or support mission, they may direct subordinate commanders to develop METLs to support employment in those missions."¹¹¹ This approach is too open-ended and lends itself to "hey you tasking."¹¹²

Presented with the dilemma of more requirements than capabilities, higher-level

¹⁰⁹ FM 100-5, *Operations*, offers inclusive definitions on pages 2-0 and 13-0.

¹¹⁰ David Jablonsky, "Army Transformation: A Tale of Two Doctrines," page 7 of the internet copy.

¹¹¹ FM 3-0, pg 3-11.

¹¹² Also referred to as "911 missions," or "line of sight tasking."

commanders have resorted to a case-by-case “ad-hocism” in order to generate forces for the increasing number of SSCs.¹¹³ In essence, senior leaders are compelled to go down the list of units available, in order to cobble together a force every time a new crisis emerges. Kosovo provides an excellent example of this process.

Soon after Operation Allied Force commenced, General Clark requested the Army deploy a force of Apache helicopters “to provide better close-in capabilities against enemy tanks and armored personnel carriers than that offered by fixed-wing fighters.”¹¹⁴ To fill this request, a number of force packages options were available. One option included at least four in theater AH-64A Apache battalions located in Germany. The second option was to deploy the Army’s first AH-64D Longbow Apache battalion recently certified in the 1st Cavalry Division. These upgraded aircraft included “a more sophisticated radar and used missiles with longer range.”¹¹⁵ However, the newer Apaches, stationed in Texas, would take much longer to deploy than any in theater Apache units. These older aircraft were closer to the area of operations and could self deploy. Additionally, the Texas based “Longbows [were] being reserved in case war erupts in the Persian Gulf.”¹¹⁶

With the mission to fill the theater commander’s need, US Army Europe cobbled together a twenty-four aircraft package by utilizing aircraft from both attack battalions assigned to the 11th Aviation Brigade, V Corps’ deep attack force.¹¹⁷ Once deployed, the existence of significant training and readiness shortfalls quickly became apparent, requiring immediate correction before

¹¹³ Jablonsky, “Army Transformation: A Tale of Two Doctrines,” pg 10. For the purposes of this monograph, the author defines “ad-hoc task organization” as grouping forces together from different divisions or corps in order to accomplish a specific mission. Peace operations in Bosnia and Kosovo provide excellent examples. XVIII Airborne Corps provides a light infantry company as the quick reaction force for all Bosnia rotations. Additionally, XVIII Airborne Corps provided an Airborne infantry battalion to V Corps’ 1st Infantry Division during its first rotation in Kosovo.

¹¹⁴ Benjamin S. Lambeth, “Task Force Hawk,” *Airforce Magazine, Journal of the Air Force Association* 85, no. 2, (February 2002), 78.

¹¹⁵ Bryan Bender, “Waiting for the Apaches,” *The New Republic: A Journal of Politics and the Arts*, Issue 4399, (10 May 1999), 16.

¹¹⁶ Ibid.

¹¹⁷ Lambeth, 79.

commencement of combat operations. In particular, “sixty-five percent of the assigned aviators had less than 500 flying hours in Apaches, and none were qualified to fly missions requiring night vision goggles.”¹¹⁸

Task Force Hawk’s “ad-hoc” task organization and training deficiencies, corrected during a month of mission rehearsal exercises, were not the primary reasons preventing their employment in the war. The Army’s failure to adapt to the conditions of the war doomed any chance of Apaches seeing action. In particular, the Army’s insistence on providing its own suppression of enemy air defense (SEAD) through use of long-range rocket and artillery fires, instead of relying upon Air Force and Navy joint SEAD sealed the Apache’s fate. Scattering “thousands of submunitions all over Kosovo in an indiscriminate attempt to suppress enemy AAA and infrared SAMs ... was out of the question from the very start, given NATO’s determination to avoid any significant incidence of noncombatant casualties.”¹¹⁹ In the end, operational employment differences, the changing conditions within the theater of operations, and senior officer difference in opinion, all combined to prohibit the employment of the Apaches.¹²⁰ In essence, this episode highlighted the Army’s capabilities versus requirements problem.

Faced with requirements that stretched the force’s capabilities, the Army essentially chose to risk the consequences of applying an inappropriate capability to meet the requirement for participation in the ongoing war in Kosovo. Part of the cause of the conflict between the Pentagon and the theater commander was the dilemma of generating enough force to respond to the crisis in Kosovo, while simultaneously maintaining separate forces to execute ongoing

¹¹⁸ Ibid., 82. Apaches fly at night using their Forward Looking Infrared Radar (FLIR). Night vision goggles increase a pilot’s ability to see high-tension wires during low level flight.

¹¹⁹ Ibid, 81.

¹²⁰ Lambeth, pg 80. Also see Wesley K. Clark, *Waging Modern War*, (New York: Public Affairs, 2001). Pages 227-228 and 451-452, discuss General Clark’s frustration with General Reimer, the Army Chief of Staff (CSA). General Clark feels General Reimer did not support his requests for forces. Moreover, he feels General Reimer’s misgivings swayed the other service Chiefs to recommend that the Secretary of Defense deny the use of Apaches once LTG Hendricks, dual hatted as commander of V corps and Task Force Hawk, certified the crews as ready for combat operations.

shaping tasks, and still having enough left over to respond to a second, more traditional MTW.¹²¹

In effect, the Army judged the risks of committing the Longbow Apaches, allocated for a potential, traditional MTW as more severe than the risks of not participating in the current MTW.

More importantly, Kosovo called into question the key BUR assumptions reaffirmed in the 1997 and 2001 QDRs – namely that forces could quickly disengage from ongoing peacetime engagement missions for employment in an MTW. Returning to this assumption allows further analysis of the requirement to capabilities gap.¹²² Pulling forces from an ongoing peacetime operation or an SSC “may pose significant operational, diplomatic, and political challenges.”¹²³ Instead of generating the force to defeat the second adversary in the near term, the workable option may be to just halt this adversary’s progress. As the first MTW concludes, combat tested forces become available to defeat the second adversary, gaining back territory lost, and concluding that war. Simply put, having the capability to disengage to meet increasing threats is only one side of the equation. The other side rests upon whether the capability meets the parameters of the requirement, or even if the international environment will allow this to occur.

Balancing this capability to requirements equation necessitates risk analysis. This analysis should identify the mix of threat and opportunity, as well as prioritize which capabilities will satisfy which requirements. Without prioritization, confusion exists over which forces perform SSCs and which perform MTWs. David Jablonsky succinctly sums up the Army’s

¹²¹ Of note, Kosovo was not the first limited war to compete for combat forces with a potential larger war. Early in the Korean War, the Joint Chiefs of Staff denied General MacArthur’s request of an additional four division Army for the counteroffensive to the North Korean invasion. Their rationale, any further commitment of US troops to Korea would pull forces from those designated for a potential war with the Soviets on the plains of central Europe. See Clay Blair, *The Forgotten War: America in Korea 1950-1953*, (New York: Doubleday, 1987), pgs 121-123. Compare this to General Clark’s discussion with General Ralston, the Vice Chairman of the Joint Chiefs of Staff found in Clark, pgs 312-313. The Similarities are remarkable.

¹²² Vinson, 3. Additionally see pages 13-14 of the 2001 QDR which does not directly say forces must transition between peace operations and war fighting, but emphasizes a force and strategy with a “capabilities-based approach” for dealing with uncertainty. The implication of this approach remains the same though, forces ready to go anywhere and anytime to accomplish the mission. It is implied that this would include forces rapidly transitioning from peace operations to war fighting.

¹²³ William S. Cohen, “Report of the Quadrennial Defense Review,” (Washington: GPO, May 1997), 11-12. As quoted in Vinson, 3.

predicament at the time of Operation Allied Force by remarking, “a balanced shape-respond-prepare approach is good defense strategy only if it is adequately resourced. If not, it can be disastrous, particularly in the absence of clearly articulated priorities on where to place emphasis and where to accept or manage risk.”¹²⁴ The consequences of not fully supporting a theater commander prosecuting an ongoing MTW, have thrown the defense community into rancorous debate over the Army’s relevancy. Putting this in the context of complexity theory, the war in Kosovo was a small change in the international environment that pushed the Army over the bounds of complexity into chaos.

To demonstrate further how events in the international environment in 1999 pushed the Army beyond the bounds of complexity requires returning to Czerwinski’s Period Doubling Cascade Model. In figure 3.1, the author modifies Czerwinski’s model by including the regions of state-to-state relations and replaces his characteristic for the regions of complexity with the spectrum of conflict.¹²⁵

¹²⁴ Jablonsky, “Army Transformation: A Tale of Two Doctrines,” 7.

¹²⁵ The basis for replacing the regions of Czerwinski’s model with the regions of state to state relations came from Alvin and Heidi Toffler, *War and Anti-War: Survival at the Dawn of the 21st Century*, (Boston: Little, Brown & Co., 1993). The book centers on anti-war deterrent strategies, concluding these are the only healthy way for societies to evolve. The idea for describing the regions of state to state activity within the context of military task and purpose came from lesson two of COL James Greer’s Decisive Operations elective, taught at the School of Advanced Military Studies, Fort Leavenworth Kansas, 07 January 2002.

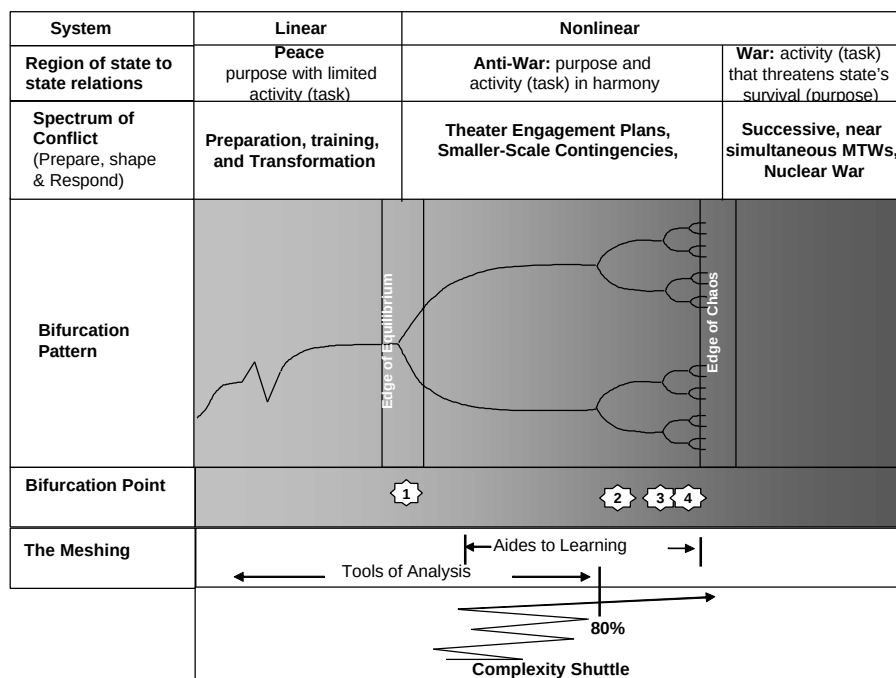


Figure 3.1 The Period Doubling Cascade Revisited

To the left of the modified Period-Doubling Cascade is peace. However, a nation's peace is often influenced by the actions of a regional entity affecting the international environment. As outside instability affects a stable nation, a bifurcation occurs. The affected nation can choose to do nothing, and suffer the consequences of further instability. Alternatively, the nation can employ anti-war or deterrent strategies, in essence shuffling to the right, to survive. If the perpetrator is persistent, and the affected nation resists, these new actions create succeeding bifurcations. Finally, this interaction pushes one or both over the edge into chaos. An implication of crossing the boundary into chaos is the loss of the means to continue influencing that environment.

The war in Kosovo provides an example of this hypothesis at work. Milosevic's brutal treatment of his rebellious ethnic Albanian population in late 1998 and early 1999 led to a growing refugee problem, threatening peace in the Balkans. His policies threatened the stability

of neighbors, particularly Macedonia. Because his solution to an internal problem had the real potential of destabilizing the entire region, European leaders quickly condemned Milosevic's actions. However, anti-war measures such as condemnation, threats, and economic sanctions did not stop the chaos or bring about peace to Kosovo. It took stronger measures. A NATO led war eventually stopped the ethnic cleansing. Chaos ruled while NATO bombed Serbia in an effort to impose its will. Changes were required in order for this chaos to end, and for Milosevic to remain in power. In particular, Milosevic had to acquiesce to NATO's demands of removing his military and police forces from Kosovo and allow stationing of an international military force. Today, a deterrent strategy imposed by an international ground force allows a semblance of order in Kosovo, yet the peace remains elusive.

The hypothesis also serves to explain the interactions between America's security policy and the apparatus that executes said policy. As noted earlier, the primacy of America's security policy is deterrent measures that prevent MTWs. War then is chaos, for war is a failure of deterrent policies and activities. At the extreme end is nuclear war, an activity that is clearly not in harmony with the purpose of preservation of the state. Surrounding the edge of chaos are the limited forms of war, smaller-scale contingencies (SSC) and major theater war (MTW). It is the author's belief that SSCs and the first MTW, like the recent one in Kosovo, reside to the left of the edge of chaos. Subsequent nearly simultaneous MTWs, requiring increasing commitments of military force fall to the right of this boundary. This is because the resultant smaller force in being or disengagement from an ongoing SSC reduces America's deterrent capability.

In the absence of prioritization, confusion exists over which force performs SSCs and which fights MTWs. Evidently, if the same force is required to perform these missions, once committed in one, its corresponding capabilities in the other diminish. Separation, either through rotation or through specialization, then is required to balance requirements and capabilities.

High OPTEMPO and The Declining Capability to Win The Second MTW

The war in Kosovo demonstrated the Army's inability to balance capabilities with requirements. A significant cause for this was the aggregation of affects from many DOD and Army force generation decisions. Part of the observable result of these decisions was an increase in unit operations tempo (OPTEMPO).

The state of Task Force Hawks' readiness went beyond just anecdotal data. Here was hard data that supported the long held belief that the Army's increased OPTEMPO was affecting training, and therefore capabilities. A comparison of General Dennis Reimer's testimony in January 1999 with General Shinseki's less than a year later, unmistakably demonstrated that the concept of delay was masking the micro-effects of an increased OPTEMPO upon Army readiness.¹²⁶

General Shinseki's October 21, 1999 testimony on Army readiness before the House Armed Services Committee provided the American public with the sobering results of executing a do more with less security policy. Indications of a strategy to structure imbalance included a 300 percent increase over the Cold War average for contingencies, up from 16 during the period of 1947 to 1989, to 45 during the past decade. Additionally, the increased number of contingencies translated into an average of 28,000 soldiers deployed daily – the equivalent of a

¹²⁶See General Dennis J. Reimer's "Testimony to the Senate Armed Services Committee," January 05, 1999. [Online], available at <http://www.fas.org/man/congress/1999/t19990105-reimer.htm>. Accessed 15 January 2002. On page 2, General Reimer comments "anecdotal evidence always precedes the hard quantifiable data that validates a serious decline in readiness. The danger however is that by the time you have firm evidence in hand, the quality of the force will have already been compromised." General Shinseki provides quantitative data to bring this conclusion home to the committee members. See "Statement by General Eric K. Shinseki Chief of Staff United States Army on Status of Forces," Testimony before the House Armed Services Committee of the 106th Congress, 21 October, 1999, 2-4. [Online], available at <http://www.house.gov/hasc/testimony/106thcongress/99-10-21shinseki.htm>. Accessed 16 January 2002. Herein cited as Shinseki testimony.

two division corps - in shaping operations around the world.¹²⁷

That number of deployed soldiers doesn't tell the whole story. A decade of experience with rotational deployments has taught the Army the "rule of threes." For every unit, for every soldier on the ground on a continuous contingency rotation, another is preparing to deploy, and still another is recovering from the deployment. So if 12,200 soldiers are deployed to Bosnia and Kosovo, approximately 36,600 soldiers are affected by those missions at any given time.¹²⁸

The message the CSA wanted America's political leaders to understand was that the Army is very busy performing peacekeeping tasks, which significantly degrades war-fighting skills.

From the Chief's testimony, little effort is required to extrapolate some additional conclusions. If the Army's permanent forward deployed force is 122,000 soldiers and its contingency rotating force ties up approximately 84,000 more soldiers, then forty-three percent of the force is shaping the international environment.¹²⁹ Moreover, who is ready to respond to a second near simultaneous MTW, especially when the remaining fifty-seven percent of the force is either slated to respond to an emerging MTW or deployed for service/joint training? Granted, some of the 84,000 involved in rotating contingencies are from units permanently forward deployed, and not all rotating contingency forces are conventional or from the active component. Nonetheless, the battlefield calculus highlights the fact that there is a strategy to structure imbalance. More importantly, without some change in how the Army manages the myriad of requirements produced by a changed security policy, the Army will never possess the capability to fight and win two nearly simultaneous MTWs.

¹²⁷ Shinseki testimony, 2-4. For numbers of contingencies, see Institute for National Strategic Studies, National Defense University, "1998 Strategic Assessment: Engaging Power for Peace", (Washington: GPO, 1998), 156, as cited in Vinson, pg 4. General Shinseki used 3435 post cold war deployments, and not contingencies to articulate the Army is very busy. For an interesting discussion of what actually constitutes a contingency operations see Allan R. Millet's grouping of Limited Contingency Operations into six distinct categories. Additionally, Dr. Millet concludes, the lack of standardization in what actually constitutes a contingency operation is part of the reason for the confusion concerning service reporting of the number and types of contingency operations each conducts. Allan R. Millet "The Parameters of Peacekeeping: U.S. Interventions Abroad, 1798-1999," *Strategic Review* 28, no. 2 (Spring 2000): 28-38.

¹²⁸ Shinseki testimony, pg 3.

¹²⁹ General Shinseki notes on page three of his testimony the number of soldiers permanently forward deployed. The number 84,000 follows the rule of threes, by multiplying the 28,000 soldiers currently deployed by three.

Summary

The breakdown in the old international order changed the dynamics of international behavior. Gone was the global effort to contain the Soviet Union, replaced by an emerging effort to secure trade and promote American interests. America's security goals remained generally unchanged: to prevent war, deter its escalation when prevention failed, and defeat the adversary. However, the ways and means required to pursue this policy of security through engagement underwent fundamental changes. For the military, and specifically the Army, a capabilities based strategy replaced the old threat based paradigm. Moreover, the Army faced a strategic dilemma, what Shimon Naveh terms "cognitive tension."¹³⁰ Leaders had to balance a force structure, sized primarily to accomplish its most dangerous mission with the increasing load of peacetime engagement. This reduced the number of forces available to accomplish the most dangerous mission. Thus, in allocating forces, Army leaders faced a polarization between the strategic aim of deterrence through peacetime engagement, and the primary mission of fighting and winning the nation's wars when this deterrence failed.

The cause of this dilemma was two-fold. First, President Clinton, in order to strengthen the economy, purposefully reduced DOD's Future Years Defense Program funding beginning in fiscal year 1995 by \$104 billion. For the Army, the quickest way to save money is to cut force structure. Second, President Clinton rapidly learned the quickest way to shape the international environment or deter adversaries was through the application of military power. The capability to execute two nearly simultaneous MTWs eroded each time military forces engaged in open-ended SSCs. For the military, America's security state of affairs began increasingly to look a lot like that envisioned in the 1992 National Military Strategy - win two nearly simultaneous conflicts *plus conduct smaller operations*. DOD examined but discarded this scenario during the 1993 BUR, because it concluded like the 1992 NMS, that the Army required twelve active divisions to

execute this strategy.¹³¹ The unintended consequence of these changes in the national security environment in which the Army operated was an over worked military facing serious readiness and retention problems.

President Clinton recognized this during the later half of his second term as America's economic boom produced the first budget surpluses since the Eisenhower administration.¹³² With his economic objective realized, the President planned to increase defense spending by \$112 billion over fiscal years 2000-2005, partly to transform the Armed Forces, but more importantly to bring the Army back from chaos to complexity by buying back its dwindling readiness brought about by its over commitment.¹³³ The question remains, will increasing the budget be enough to offset the impact of changes in the nation's security environment or are changes in organizational design required to meet these demands?

For most of the decade, agility allowed the military to manage the increasing workload. However, success quickly became its Achilles' heel. Success became a form of positive feedback, rapidly generating more and longer engagement missions. At the same time, the increasing pace and number of military operations was acting as negative feedback. More missions meant less training for war, and less capability to respond, thus affecting overall readiness. This dilemma was summarized by General Dubik:

¹³⁰ Shimon Naveh, *In Pursuit of Military Excellency: The Evolution of Operational Theory*, (Tel Aviv: Cummings Center, 1997), 13.

¹³¹ Davis, 18. Table one shows the Army requires twelve divisions to execute this strategy.

¹³² Jordan, Taylor, and Mazarr, 71

¹³³ Compare President Clinton's 94-96 economic focused NSSs with his 1999 and 2000 NSSs. His first term NSSs do embrace modest increases in defense spending, however they do not even keep up with inflation, and actually represent the continued decline in real defense spending begun in 1986. President Clinton's last two NSSs acknowledged the decline in military readiness and commit an additional \$112 billion dollars. It is interesting to note that President Clinton reduced defense spending by \$104 billion only to replace this money eight years later. Also, see Jordan, Taylor, and Mazarr who note between pgs 71-75 that President Eisenhower viewed a strong economy as the number one pillar ensuring national security. Eisenhower purposefully reduced conventional forces, relying upon massive retaliation and strategic airpower as economy of force measures in order to free up funds for economic improvement.

Crises arise and we cannot say “no” to the National Command Authorities. If the President says, “go to Kosovo,” we do not say, “gee, we are kind of busy.” And when he says “remember, besides Bosnia you have to train for major theater war,” we do not say “hey we could sure use a break.” If things heat up in East or Southwest Asia, the call is not “are you ready?” It is simply “go.”¹³⁴

The issue here is not whether to go or not, but what tradeoffs are required to accomplish the mission. In sum, can the potential gain from accomplishing a new mission, coupled with accepted degradation in other areas, mitigate the risk to the larger mission of being able to fight and win two nearly simultaneous MTWs? Once again, without prioritization or separation as adaptive strategies, the Army will continue to face major obstacles brought about by changes in its environment. Additionally, until the Army implements an adaptive strategy, there can be no increase in strategic responsiveness, nor reduction in OPTEMPO.

Returning to the earthquake analogy, in 1999 the pace of operations and the dwindling readiness were similar to two tectonic plates grinding against each other on a recognized fault line – America’s Army. The Army intuitively knew continued operations were only increasing the build-up of pressure. Leaders could not predict when the release of this pressure would occur, potentially shaking the nation’s security policy to its very core; just that it would. The micro effects of the grinding, in part masked by the Army’s previous success, only postponed the inevitable. The war in Kosovo, a small event involving few Army forces, provided the last shift – the critical value - that triggered a violent release of built up pressure with the pace of operations plate folding under the readiness plate. The aftermath was an acrimonious debate over relevancy, shaking the Army to its very core.

¹³⁴ James Dubik, “IBCT at Fort Lewis,” *Military Review The Professional Journal of the US Army* 80 (September-October 2000), pg 23. Cited in Jablonsky, “Army Transformation: A Tale of Two Doctrines,” 8.

Chapter 4.

Introduction

Concluding that Task Force Hawk's performance in Kosovo was the sole reason General Shinseki called for increased strategic responsiveness through transformation, completely discounts the extensive, decade long effort undertaken to solve the problems imposed by the evolution of security strategy.¹³⁵ Intellectually, the Army has sought to identify new ways and means to achieve the ends stated in the nation's security policy. Studies and experiments, including 1992's Louisiana Maneuvers, Force XXI, and the Army After Next, among others, have sought to generate the new means and methods for dealing with a changing security environment. This chapter looks beyond these studies, examining other options that subscribe to Van Creveld's rules, identified in chapter three.

Chapters two and three identified that the Army is a complex adaptive system, operating within a changed environment, struggling with a shortfall between requirements and capabilities. This chapter therefore, examines two current methods and two proposals seeking to reduce this imbalance while meeting the demands of a changed security environment. However, before analyzing these options, this chapter begins by examining versatility. Comprehending what versatility means to the conventional Army yields two force structure options for adapting to or shaping the nation's security environment. These options, either specialized mission-focused forces or general-purpose forces become categories for schematics and proposals intended to increase Army responsiveness while reducing OPTEMPO. The chapter concludes by using Thomas Czerwinski's second tool of analysis – specifically, Van Creveld's three rules, to scrutinize these options with the aim of demonstrating their advantages and disadvantages.

¹³⁵ Jablonsky, "Army Transformation: A Tale of Two Doctrines," 2.

Versatility Revisited: The Way to Achieve Full-Spectrum Dominance?

As noted in chapter one, versatility is the fifth tenant of Army operations and describes an inherent capability to perform all the mission requirements of full spectrum operations. The Army's execution of numerous peace operations during the last decade highlights problems with versatility. On the one hand, the XVIII Airborne Corps' transition from a forced entry combat operation to an intervention peace operation while enroute to Haiti in 1994 is a positive example of versatility.¹³⁶ Alternatively, the Army's doggedness in relying upon ground SEAD as opposed to air SEAD in Kosovo, demonstrated a lack of versatility. These observations beg the question, of whether the concept of versatility for all Army units is within reach or is the tenant itself flawed? Part of the answer lies in the Army's current organizational design. A second piece lies in the struggle between training for peace operations and war fighting, induced by the uncertainty of today's international environment.

Whereas strategy dictates requirements, end strength and organizational design contribute to force capabilities. The authorized active component Army end strength to execute military objectives in support of the President's security strategy hovers around 480,000.¹³⁷ From this total approximately 122,000 are forward deployed.¹³⁸ The war fighting headquarters' that controls and employs the majority of these troops is the Army corps. Today's organizational design consists of a heavy corps forward deployed in Europe, a second one stationed in the United States, a mixed corps with units scattered around the Pacific Rim, and finally an east coast

¹³⁶ Gilner, O'Keefe, and Tata, 9-13. The authors conclude XVIII Airborne Corps' demonstrated versatility was the result of a force identified, and trained well in advance of the impending operation.

¹³⁷ As of this writing, a growing number of senior military leaders are calling for personnel increases. Specifically, the Army is requesting to increase its end strength by 40,000 soldiers. See "General Says U.S. Troops Tired, Backs Forces Boost," *Washington Post*, (15 March 2002), 14. [Online], available at https://ca.dtic.mil/cgi-bin/ebird.cgi?doc_url=/Mar2002/e20020315general.htm. Accessed 15 March 2002.

¹³⁸ Shinseki testimony, pg 3.

based mixed corps.¹³⁹ To be sure, this structure is similar to the “Base Force” in organization. However, a pure heavy or light corps by itself lacks the organizational design to execute full spectrum operations. As noted in chapter three, the Army tries to mitigate this lack of capability through “ad-hoc” task organization.¹⁴⁰

The second piece to the question of versatility within the Army is the notion of certainty, or more importantly, uncertainty. The uncertain nature of today’s international environment demands a flexibility inherent to general-purpose units. It demands units who are proficient at both war fighting and peace operations. The heart of the problem speaks to the fact that potential peace operations and war fighting compete for scarce training resources. The truth is a unit does not become versatile just because this term is a tenant of Army operations. An effort or system that balances training for war with training for peace operations is required to achieve versatility

From this examination, the Army is presented with two types of force structure to address the tension in versatility created by the imbalance between requirements and capabilities. First, the Army could achieve versatility by adopting what Mark E. Vinson terms as “mission-focused structure.”¹⁴¹ This type of proposal seeks to achieve a versatile Army in the macro sense, through an agile, specialized force structure, by assigning specific missions to specific conventional forces. Essentially, this option seeks to produce boxers and not decathletes.

The other option is to implement the current doctrinal thinking on versatility. This method does not optimize mission accomplishment through force specialization, but instead relies on a workable option that satisfies the ends through a method and means based upon a general-purpose construct. The basis of this option is generalization. This takes the form of rotating the

¹³⁹ The 1st ID (M) (-) and 1st AD (-) in Germany and the Southern European Task Force (later to become the 173 separate infantry brigade (Airborne) comprised the V Corps. 1st CAV, 4th ID (M), 3rd ACR, and CONUS stationed brigades of the 1st ID and 1st AD formed the major combat elements of the III Corps (Armored). The 25th ID (L), 1st brigade, 6th ID (later to become the 172nd SIB), and the 2nd ID (primarily a mechanized division with the addition of two Air Assault infantry battalions) made up I Corps. The XVIII Airborne Corps consisted of two brigades of the 10th Mountain Division (LI), the 101st Airborne Division (Air Assault), the 82nd Airborne Division, and the 3rd ID (M).

¹⁴⁰ see note 113.

¹⁴¹ Vinson, pg 10.

force through the requirements dictated by the nation's security policy. Versatility exists because all forces have the capabilities to achieve workable solutions in either an MTW or SSC scenarios.

In sum, the concept of versatility produces a tension, which needs attending to before the Army finds itself in another Kosovo. Evidently, versatility as currently practiced will not increase the Army's strategic responsiveness today. A modification to the concept or its implementation is required.

Van Creveld's Third Rule, the Way to Make Versatility Work

The limitations within the concept of versatility have led to numerous proposals, some of which fall into the category of general-purpose forces. However, the majority propose specialized mission-focused structures as the answer. This chapter looks at two current general-purpose force methods, FORSCOM's Balkan's Sourcing Strategy, and the U. S. Air Force's transformation to Aerospace Expeditionary Forces (AEF). Consecutively, it then examines two mission-focused structures. Then, the advantages and disadvantages are analyzed through the lens of Van Creveld's rules. This analysis concentrates on proposals that adhere to Van Creveld's third rule because according to his conclusion, proposals, which subscribe to his first or second rule "are inadequate and stand in danger of being self-defeating."¹⁴²

Because Van Creveld formulated his rules before the widespread existence of a language for complexity, clarification of his terms is required. For the purpose of this study, Van Creveld's "task" represents the military's task of serving the nation's security interests. More specifically, this task is broken down into the three subtasks of shape, prepare, and respond. Similarly, Van Creveld's concept of "command performance" is expanded to mean an organization's performance. With this understanding, examination of the first general-purpose proposal begins.

¹⁴² See note 64.

FORSCOM Balkans Sourcing Strategy – A General-purpose Structure

The Army, cognizant of the demands placed upon its corps headquarters as they balance the increase in peace operations with the demands of war fighting readiness, began looking for ways to alleviate the pressure. Specifically, in the summer of 2000, U.S. Army Forces Command (FORSCOM) formulated a Balkans sourcing strategy to address future rotations for ongoing peace operations in Southeast Europe. The strategy rotates responsibility between XVIII Airborne Corps and V Corps for sourcing the six-month rotations in both Bosnia and Kosovo.¹⁴³ By limiting the Balkan peace tasks to certain units during certain time periods, this plan represents a small step toward reducing the uncertainty facing the corps. Knowing which, and more importantly, when specific units will deploy to the Balkans provides a training focus, easing the training dilemma for those identified units.

According to Van Creveld's rules, FORSCOM's effort falls in line with his second rule – simplify the organization (in this case FORSCOM) so it can operate with less information. Using Czerwinski's terminology, this command by plan effort centralizes uncertainty, instead of distributing it, by rotating the Balkans mission between just two corps. However, because these corps must still simultaneously execute their respond and prepare tasks as part of the national military strategy, no true separation exists. The plan does increase responsiveness by identifying those units tasked for operations in the Balkans, so one could conclude that those not slated for a Balkan's rotation *may be* available for immediate employment during an emerging major theater war or contingency operation. However, just because a unit is not on the tasking list does not mean it is immediately available for employment. Conceivably, these units could be participating in other peace operations such as Operation Desert Spring, or tasked to perform specific missions outlined in a CINC's theater engagement plan, or participating in service specific and/or joint training exercises.

In centralizing uncertainty by alternating force generation responsibilities between two corps, FORSCOM's plan seeks to task general-purpose forces for specific timeframes, thereby allowing uncommitted forces to focus on war fighting readiness. However, by not further dividing the remaining tasks and assigning forces to accomplish these tasks for specific time periods, this proposal does not reduce overall OPTEMPO.

The Aerospace Expeditionary Force – A General-purpose Force Structure

Like the Army, the U.S. Air Force felt the OPTEMPO and MTW readiness effects of a changed security environment. Moreover, like the Army, it wrestled “with various ways to respond to the increasing number of contingencies that require us to deploy.”¹⁴⁴ However, unlike the Army, the Air Force settled upon a method in late 1998, announcing an organizational as well as cultural change in how the Air Force does business. This is called the Air Expeditionary Forces (AEF).¹⁴⁵ The concept seeks to meet the demands of a changed security environment by:

- Providing CINCs the right force at the right place at the right time, whether the mission involves humanitarian relief or combat operations.
- Reducing deployment tempo by building more stability and predictability into the way we schedule our people to respond to contingencies.
- Taking full advantage of the vital contributions of the total force – active, civilians, reservists, and Air National Guardsmen.¹⁴⁶

¹⁴³ FORSCOM Command Readiness Program Information Briefing “Balkans Sourcing Strategy,” (07 September 2000), slide 9. [Online] available at <http://www.first.army.mil/RLC/DCSOPSRLCslides.ppt>. Accessed 30 December 2001.

¹⁴⁴ Michael E. Ryan, “Ryan Discusses Expeditionary Aerospace Force Concept Plans”, *Airman*, 42, no.10 (October 1998), 12.

¹⁴⁵ There can be some confusion over term AEF. Originally the acronym stood for Air Expeditionary Forces. However it has evolved into Aerospace Expeditionary Forces to better describe the capabilities the force package provides to regional CINCs. Within this document, the A in AEF stands for Aerospace. Also of note, while AEF describes subordinate force packages, Expeditionary Aerospace Force (EAF) is a term to describe the U.S. Air Force as a whole. For a more detailed look at the evolution of the AEF concept see Paul S. Killingsworth, Lionel Galway, Eiichi Kamiya, Brian Nichiporuk, Timotny L. Ramey, Robert S. Tripp, and James C. Wendt, “Flexbasing: Achieving Global Presence for Expeditionary Aerospace Forces”, (Research Report, Santa Monica California, The Rand Corporation, 2000).

¹⁴⁶ Ryan, 12.

Coupling the reason for the change and the purpose of the concept, Brigadier General William Looney notes the mission of the AEF “is to give regional commanders in chief (CINC) rapid, responsive, and reliable airpower capabilities and options that meet specific theater needs.”¹⁴⁷

In order to balance regional CINC requirements with service capabilities, the Air Force pooled all but its forward deployed units in Korea into ten multi-purpose AEFs, and two rapid response air expeditionary wings (AEW).¹⁴⁸ The typical AEF consists of approximately 125 – 150 aircraft of all types with about 10,000 personnel.¹⁴⁹ Essentially, the Air Force responded to DOD’s division of the nation’s security policy into shape, prepare, and respond tasks, and then established forces to accomplish missions within these domains. This method falls in line with Van Creveld’s third rule for enhanced organizational performance.

With the force so designed, the Air Force then established a cycle to rotate forces through the different tasks. The cycle is fifteen months in length but broken down into five, three-month phases with two AEFs assigned to each.¹⁵⁰ The assignment of two AEFs to each phase is important. It represents the level of operational deployment that combat and combat support units can sustain, without significantly impairing the Air Force’s ability to prepare for future major engagements.¹⁵¹ In raw figures, this represents no more than twenty percent of combat forces employed for operational requirements.¹⁵²

A closer look at the organization of the force and the fifteen-month cycle, seen in figure 4.1, yields an understanding of how the Air Force balances its requirements with its capabilities.

¹⁴⁷ William R. Looney, “the Air Expeditionary Force,” *Airpower Journal* 10, no. 4 (Winter 1996), 4.

¹⁴⁸ Bruce Rolfsen, “Expeditionary Force Deployments Mapped Out for Next Two Years,” *Air Force Times* 61, no. 11 (09 October 2000), 9.

¹⁴⁹ John R. Reid, “The USAF Aerospace Expeditionary Force: Flying into the 21st Century”, (Thesis, Naval War College, 1999), 8.

¹⁵⁰ *Ibid*, figure 1, pg 16.

¹⁵¹ Donald G. Cook, Robert Allardice, and Raymond D. Michael jr., “Strategic Implications of the Expeditionary Force,” *Aerospace Power Journal* 14, no. 4 (Winter 2000), 9.

¹⁵² *Ibid*, 11.

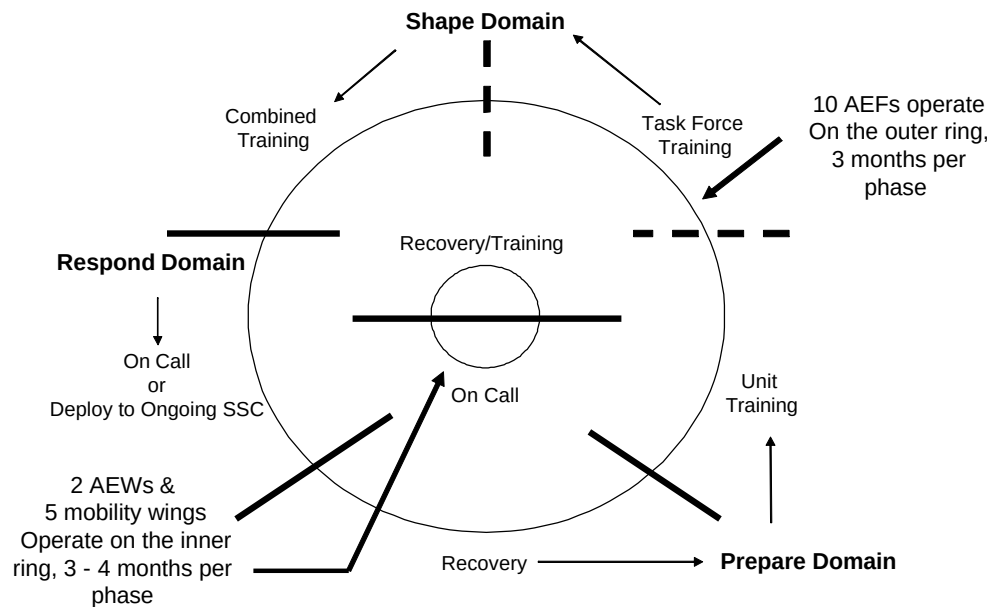


Figure 4.1 Air Force Rotation Scheme and Mission Domains¹⁵³

Two AEWs, representing about 10% of the combat force switch back and forth between on-call and training/recovery cycles, sharing the task of responding to world wide emerging threats.¹⁵⁴ Simultaneously, the ten AEFs rotate through the five stages of the cycle. Each pair begins the cycle by recovering from it last deployment, then transitions to unit specific training. Next, the AEFs undergo task organization for ongoing contingencies, and then conduct specific area of responsibility (AOR) training.¹⁵⁵ This training period ends with a series of combined exercises designed to certify each task force for deployment.

As training increases so does readiness. Based upon this fact, as forces progress through the training stages of this cycle, the task they perform changes. The forces progress from

¹⁵³ Reid, 16. This figure is a modification of his figure 1.

¹⁵⁴ Ibid, 8.

¹⁵⁵ Ibid, 9.

accomplishing just prepare tasks to carrying out both shaping and respond tasks, to finally accomplishing only respond tasks as the AEFs enter the employment stage of the cycle.

AEFs enter the employment stage, already task organized, to either replace forces involved in current contingencies, or augment the AEWs as additional forces ready to respond to CINC requirements.¹⁵⁶ Of note, as a measure of effectiveness, those forces on-call must be capable of placing ordnance on target within forty-eight hours of alert notification.¹⁵⁷ Those forces deployed to participate in ongoing contingency operations change tasks once again. Now these forces are executing specific shaping tasks. Additionally, those forces permanently forward deployed in Korea primarily perform a shaping task. Yet their proximity to a hostile force means these forces must also be ready to respond to no notice war on the Korean peninsula.

Upon initial examination, this switching of forces and tasks appears chaotic and unorganized. It appears as though subcomponents are doing their own thing, without regard for peers or the higher organization. However when one steps back, and examines the system through the lens of complexity theory, a unique wholeness appears. An order exists where one once saw only chaos. By examining the system as a whole, connections appear that link subcomponents to the larger organization. Utilizing Van Creveld's third rule, this effectively improves organizational performance.

This cyclic approach to achieving national security policy objectives produces a number of advantages and disadvantages. The principle advantage of this method rests in the Air Forces' position that in order to maintain responsiveness, its operational requirements cannot exceed more than twenty percent of its combat forces. The critical importance of this position is that it corresponds to the foundation that the Air Force built its adaptive strategy to keep up with a changed security environment. This strategy produces separation of tasks in both time and

¹⁵⁶ Ibid.

¹⁵⁷ Michael J. Nowak, "The Air Expeditionary Force: A Strategy for an Uncertain Future?" Maxwell Paper No. 19, Air War College (1999), 10.

purpose, permitting component AEFs to focus on only one domain of tasks during a specified time frame. Focus is achieved because other AEFs of the general-purpose force are performing tasks in the remaining domains. When combined, the effect produced is the entire force working together to achieve the overarching task of national security.

Essentially, this strategy prioritizes responsiveness, while integration, PERSTEMPO, and steel on target serve as feedback mechanisms, measuring effectiveness. Thus by rotating nearly all its forces through the shape, prepare, and respond domains, the Air Force balances its requirements with its capabilities. The beauty of this system is that it does not just adapt to the environment, it forces DOD and the CINCs to balance Air Force capabilities and requirements. Here, the Air Force informs DOD and political leaders that without prioritization, mission performance will decrease. Thus, instead of just surviving, this system is growing. Clearly, this approach distributes uncertainty, improving the organization's performance by meeting both requirements of Van Creveld's third rule.

The principle advantage also serves as the principle disadvantage to this method. With only twenty percent of the combat force available to regional CINCs at any one time, any excess requirements upset the system's balance. Reduction of this turbulence only occurs when the requirements return to the twenty percent level. Unfortunately, it takes an entire fifteen-month cycle to realize this.

Vinson's Mission-Focused Structure

Moving on from general-purpose options; Mark E. Vinson's article in the summer 2000 issue of *Parameters* proposed a mission-focused Army structure that is "ready to conduct two MTWs from a posture of global engagement."¹⁵⁸ The hallmark of his proposal is an integrated active component and reserve component, with specific forces assigned specific mission areas.

¹⁵⁸ Vinson, 7.

The guiding principle behind this is an “active component sized and structured to do those missions that cannot be done by the reserve components ... missions that require rapidly deployable trained and ready forces.”¹⁵⁹ Vinson envisioned a separate MTW Force and a SSC corps. Plainly, this proposal falls within Van Creveld’s third rule, divide the task and establish forces capable of accomplishing subtasks with limited autonomy.

Vinson’s two MTW force is further broken down into halt and buildup/counteroffensive forces, along the lines of established MTW phasing. Because of the limited time available to stop armed aggression, Vinson gives the active component responsibility for all halt phase forces. The active component also provides the buildup/counteroffensive forces for the first MTW, while the reserve component executes this mission for a second nearly simultaneous MTW.

Vinson goes on to size the active and reserve component two MTW force. Mentioning, “the active Army should identify its halt-phase forces for both MTWs – at least one heavy division each,” Vinson extrapolated from the Army’s Desert Storm experience that an additional force of four to six divisions is required to execute the buildup/counteroffensive phases of each MTW.¹⁶⁰ When combined, Vinson’s two MTW force consists of six to eight active and four to six reserve component divisions for a total force of between ten and fourteen divisions. These forces would have access to the resources needed to achieve the readiness levels required for their specific mission because they would not be saddled with the burden of participation in long-term contingency operations. The remaining four divisions in the Army’s inventory would perform these tasks as a smaller-scale contingency corps.

Vinson’s smaller-scale contingency (SSC) corps, a largely separate force, is critical to preserving the readiness of his MTW force. The corps would consist of at least two active component divisions who possess the rapid deployment capability required for little or no notice

¹⁵⁹ Ibid, 9.

¹⁶⁰ Ibid. The Army executed the counteroffensive phase of Desert Storm with seven divisions, five heavy, and 2 light.

employment. Reserve component forces would be “sized and shaped to provide the forces that are needed later in a contingency, such as augmenting and reinforcing forces, or follow-on rotation forces for extended contingencies.”¹⁶¹

Critical to the operation of this mixed active and reserve component SSC corps is the concept of rotation. For Vinson, this corps must be large enough to allow the active component force at least twelve months between deployments, and allow at least three to five years between reserve component deployments. Vinson envisions active forces fulfilling the force requirements for the first one or two rotations during the SSC corps’ employment.¹⁶² This would give the reserve component the lead-time required for mission specific training prior to their employment during follow-on rotations. Once relieved by the reserves, “active component forces could then train for the next possible contingency.”¹⁶³

As with previous options, Mark Vinson’s mission-focused structure contains salient advantages and disadvantages. Here, Van Creveld’s third rule allows evaluation of strengths and weaknesses. The principle advantage of this proposal is specific forces are assigned specific missions. This reduces uncertainty as a whole. Thus, a measure of predictability returns, because these units can focus their training. This increases their readiness for employment. Additionally, by separating forces according to mission, Vinson’s proposal recognizes and corrects the training dilemma, part of the weakness in today’s concept of versatility.

The way Vinson arranges the tasks that separate forces perform, offers other advantages. First, it appears this arrangement seeks to limit the overlap existing between shape and respond. Vinson recognizes the tasks of training, and a readiness to respond are embedded in both the shape and respond tasks. This overlap creates the training dilemma noted earlier, because a trained and ready force must perform both a shaping function, as well as possess the capability to

¹⁶¹ Ibid.

¹⁶² Ibid, 10.

¹⁶³ Ibid.

respond, requiring a prioritization of purpose. With Vinson's separation, it becomes evident that the shape task consists of at least two subcomponents, operations and training. The one consuming most of the Army's effort during the last decade was performing long-term SSC operations. The other is training.

Second, but more importantly, Vinson believes the only way to decrease the affect of the training dilemma is to complete training before assuming either respond or shaping tasks.¹⁶⁴ Thus, a robust force would rotate between intense mission specific training and operations. Those units training would perform neither shaping nor respond tasks, thus they must be performing prepare tasks. However, the prepare task as currently articulated in the NMS, focuses on transformation of the force to meet a future peer competitor. It does not address the training required to meet the demands of the current security environment. In summary, Vinson believes that providing the time, and then limiting training requirements to either war fighting or peace operations through specialization are key to improving Army readiness. Moreover, readiness is the key to executing two MTWs from the posture of global engagement.¹⁶⁵

This particular advantage is also the source of his plan's major disadvantages. First, this proposal reduces the current active MTW force from ten to no more than eight divisions.¹⁶⁶ To make matters worse, by assigning specific forces to certain missions, he creates separation in purpose *only*, producing an agile vice a versatile force.¹⁶⁷ If the system as a whole is stressed while executing its most difficult task, subordinate units lack the versatility to transition from either MTW to SSC or vice versa without long lead times for retraining.

Second, Vinson's proposal does not allocate any forces for transformation; the primary

¹⁶⁴ Ibid.

¹⁶⁵ Ibid.

¹⁶⁶ As noted in chapter three, successful execution of the two nearly simultaneous MTWs requires ten active divisions.

¹⁶⁷ Richard I. Neal, "Strategic Specialization: A Recipe for Disaster, *Strategic review* 26, no. 1 (Winter 1998), 22. Neal strongly supports Jointness, viewing service specialization as the antithesis of not only jointness but also versatility.

focus of the NMS's prepare task. One could conclude if his MTW force requires six and not eight divisions, then at least two divisions are available for transformation.¹⁶⁸ However, his failure to account for transformation, swings the pendulum of the prepare task too far to the side of preparing for current demands.

Third, Vinson's proposal does not account for the unique mission preformed by the 2nd Infantry Division. This division's primary focus is forward deployment for the purpose of deterring war on the Korean peninsula. Unlike units involved in long-term contingency operations designed to shape the Southeast European and Southwest Asia regions, the 2nd ID accomplishes its mission by rotating personnel not units.

In sum, Vinson's proposal inhibits versatility by building a force that is agile at the expense of versatility. Additionally, in terms of the NMS task of prepare, the proposal does not balance the risks associated with preparing for current demands with those of preparing for the future. Essentially his effort clings to the outdated threat based model, going against the capabilities based approach as articulated in the 2001 QDR.¹⁶⁹

Initial Entry, Crisis Response Forces – A Mission-focused Structure

The U.S. Army War College published a Strategic Research Project in 2000, offering a second option that seeks to meet the demands of a changed security environment. The central piece to this plan is "that Carrier Battle Groups (CVBG), Amphibious Readiness Groups (ARG), Marine Expeditionary Units (Special Operations Capable) [MEU (SOC)], Division Ready Brigades (DRB) and Aerospace Expeditionary Forces (AEF) adopt an aligned [training] schedule

¹⁶⁸ See Ann Roosevelt, "Army's First Digital Division Waits for the Call," *Defense Week*, (19 November 2001), 8. [Online] available at <http://ebird.dtic.mil/Nov2001/s20011119digital.htm>. Accessed 19 November 2001. She notes, the 4th Infantry Division spent from 1996 to 2001 testing and then converting to the Force XXI digital design. The division was finally declared deployable in October 2001 after passing its capstone exercise. Of note, 4th ID has units deployed to Kuwait, participating in Operation Desert Spring.

¹⁶⁹ See note 122.

with training and deployment cycles based on the CVBG's 18 month cycle.”¹⁷⁰ Essentially this proposal seeks to create joint initial entry, crisis response forces that habitually train and deploy/fight together.

As the title of the proposal indicates, the Army's obligation entails providing initial entry crisis response forces. However, because Army divisions train on a “three to make one” system, each division designated to provide a DRB can only produce one at a time.¹⁷¹ To provide enough DRBs to meet the continuous forward deployment of two to four CVBGs and embarked MEU (SOC) on ARGs, the project authors conclude that DRBs should come from light divisions.¹⁷² As their proposal is written, each division would rotate its brigades through a thirty-six week schedule, with one brigade conducting joint or service specific training for twelve weeks, a second brigade on call for those same twelve weeks, and the last brigade recovering/supporting the other two brigades during that same twelve week period.¹⁷³ This thirty-six week cycle, when aligned with other joint initial entry forces, provides an opportunity for joint training before all forces assume their standby or forward deployment roles.

In the larger sense, this proposal, like Vinson's, advocates force specialization. Similarly, because this plan seeks to improve organizational performance by distributing the tasks required to promote the nation's security policy, analysis of advantages and disadvantages through the lens of Van Creveld's third rule is possible.

The principal advantage this proposal offers the Army is a response force capable of thwarting either an emerging MTW or SSC, fitting the mold of a true respond force as envisioned

¹⁷⁰ Gildner, O'Keefe and Tata, ii.

¹⁷¹ Gildner, O'Keefe and Tata, 7. Also see note 122, where General Shinseki refers to this as the “rule of threes.”

¹⁷² Ibid, 25. Though the authors conclude all 4 light divisions could provide DRBs, the fact that one brigade of the 25th Infantry Division (Light) is currently undergoing conversion to the IBCT structure means this division cannot follow the rule of “three to make one”. Additionally, though the authors do not allude to it, XVIII Airborne Corps and III Corps rotate the responsibility for providing the Army with one heavy DRB.

¹⁷³ Ibid, see chart on page 27.

in the 1997 NMS.¹⁷⁴ Furthermore, as this proposal rests upon the rule of three to make one, it reinforces the concept that rotation provides critical *separation in time* of both tasks and forces. Finally, this proposal shares Vinson's belief in training prior to execution, therefore it separates the training task from the respond or shape tasks. In essence, this proposal adds training for the current international environment to the prepare task of the 1997 NMS. This separation of tasks and forces allows those forces designated as initial entry crises response, to increase their readiness.

However, the increased readiness of these forces is the principle disadvantage of this proposal. Here, the authors require the Army to "shield[s] initial entry forces from the resource draining engagement activities that have become the norm," to achieve increased readiness.¹⁷⁵ It seems the authors advocate ready light forces as an Army deterrent to international disorder. However, this position is only achievable by resting the burden of long term SSCs and two MTWs on the backs of the heavy force. In effect, this proposal requires heavy divisions to shoulder larger portions of both the shape and respond tasks. While it is true these units will not form the initial response force for either task, according to this proposal, heavy divisions must reinforce and or relieve committed initial entry forces so that these forces can prepare for future contingencies.

Along with the argument that the proposal weakens overall readiness, it also does not increase the Army's strategic responsiveness, nor does it reduce its overall OPTEMPO. In fact when taken in whole, because this proposal does not separate the heavy forces' long term shaping tasks from their MTW reinforcing tasks, it fails to meet a critical component of Van Creveld's third rule. Mainly, this proposal does not establish forces capable of accomplishing the essential subtasks derived by dividing the larger unifying task the organization as a whole is required to carry out.

¹⁷⁴ Ibid, 6.

¹⁷⁵ Ibid, 36.

Summary

This chapter examined two current methods and two proposals designed to reduce the gap between military capabilities and requirements. Utilizing Van Creveld's third rule, as an aid to learning, this chapter analyzed each method and proposal, highlighting their advantages and disadvantages. This analysis produced three unmistakable conclusions.

First, methods or plans that only produce separation in time *or* purpose favor agility over versatility. More importantly, these efforts generally fail to meet Van Creveld's requirement that when dividing a larger task, organizations need "to establish forces capable of dealing with each of these parts separately on a semi-independent basis." Thus, instead of keeping the complex adaptive system that is the Army within the bounds of complexity, over time these efforts would push the Army over the bounds either into the realm of chaos or equilibrium.

Second, by organizing the force as predominately general-purpose and then rotating that entire force through the shape, prepare, and respond tasks, the AEF creates separation in both time *and* purpose. When separation in both exists, the system meets the requirement of Van Creveld's third rule. In meeting both requirements, the AEF concept keeps the complex adaptive system that is the Air Force within the bounds of complexity.

Third, the concept of versatility is not flawed. Yet, when implemented by organizations that favor separation in time or purpose only, it gives way to agility. However, when separation in both time and purpose is achieved, true versatility exists.

With the closing of this chapter, all the pieces are in place to build a proposal that will produce versatile units leading to increased Army strategic responsiveness while reducing OPTEMPO – now. This is the focus of the final chapter.

Chapter 5.

Introduction

The essential purpose of this monograph is to answer the question of whether increased strategic responsiveness narrows the gap between Army capabilities and requirements. At the macro level, the answer is yes. What is missing though, is a method of how to achieve increased strategic responsiveness, to produce a full spectrum force, fully capable, all the time. If the Army owned the lift required to achieve faster force projection then this would answer the how of increased strategic responsiveness. Yet the Army does not own its own strategic lift assets, therefore any increase in the Army's strategic responsiveness rests upon the Army's readiness to deploy. Achieving the how of this readiness must come from a new design of the force and rotation of security tasks between components, similar to the Air Force's Aerospace Expeditionary Force (AEF) model.

This chapter addresses this requirement for a new method, adapting Army capabilities to the changing requirements of an uncertain security environment. It begins by presenting conclusions about the impact of change in the security environment. Next, it presents a model that aims to keep the Army within the bounds of complexity, by adapting to the demonstrated changes in requirements. The strength of this model, while incorporating the identified advantages of previously studied plans, is the rotation of general-purpose forces, separated by time and purpose, between the domains of shape, prepare, and respond – increasing strategic responsiveness now. Finally, the chapter ends by exploring some internal and external implications of changes in the Army's organizational design.

Conclusions

The research and analysis in this monograph produced a number of conclusions. Foremost among them was the evidence of a growing gap between Army requirements and

capabilities. Changes in a complex security environment have implications upon the apparatus that operates within this environment. Because changes in the environment usually precede changes in the system, a gap will always exist between requirements and the capabilities to meet them. Yet, through feedback, a complex adaptive system can sense changes in the environment. Its spontaneous self-organizing character allows it to then adapt to those changes and survive in spite of this gap. For America's military, the largest change came in a policy shift from flexible response to global engagement. The cascading affects of this change produced a smaller force structure as well as a strategy of shape, respond, and prepare domains. However, this study has demonstrated that these changes, instead of closing the gap, actually widened the disparity between capabilities and requirements.

Exploring the major theater war versus smaller-scale contingency debate, three conclusions became apparent. First, both concepts involve capabilities as well as requirements. Thus, many confuse the two MTW construct as a strategic requirement, when in fact it is only a desired capability, used to size the force. Second, these concepts are not exclusive but mutually supporting. Peacetime engagement activities serve to deter major theater wars. An argument is made that Operations Northern and Southern Watch, and Desert Spring represent the deterrent phase of the ongoing Southwest Asia MTW.¹⁷⁶ Likewise, forward-deployed forces in Korea perform the same function for the Northeast Asia MTW.¹⁷⁷ Third, the Army's capability to fight and win two MTWs lessens through deterrence, the possibility of actually having to execute its requirement to fight and win the nations wars.

The interconnectedness of purpose within shape, prepare, and respond tasks, appears to generate confusion, producing chaos in the apparatus that executes the nation's security policy. The Army's focus on Northeast and Southwest Asia as the most likely regions for future MTWs

¹⁷⁶ See the 2001 QDR, pg 21 which states "long-standing contingency commitments ... will, in effect, become part of the U.S. forward deterrent posture."

¹⁷⁷ Hans Binnendijk, "The Case for Forward Deployment," *Joint Forces Quarterly* 8 (Summer 1995), 7.

hinders its ability to react to escalating contingencies that become shooting wars.¹⁷⁸ By not categorizing the shooting war in Kosovo as a new MTW, the Army had to emphasize its requirement of preventing the outbreak of a second MTW over its requirement to respond to the war in Kosovo. This confusion in purpose handicapped the Army's strategic responsiveness.

Some of this confusion is the result of a policy that knowingly creates an ends versus means dilemma, where the entire Army structure is obligated for two nearly simultaneous MTWs while also executing a growing number of force projection engagement missions. Each new mission, or an extension of a current mission, draws forces from the pool available to fight a second MTW. DOD's answer to this growing dilemma - versatile organizations - is the heart of the first two assumptions of the 1993 BUR. DOD's stubbornness in sticking with a two MTW strategy described as the most dangerous, yet proven the least likely course of action, placed too many requirements upon a reduced force structure.

Additionally, some of the fault resides with the apparatus executing the strategy. The Army failed to recognize DOD's change in policy as a "strategic inflection point," thus failing to implement a method for achieving the requirement to shift on demand, any and all forces between peace operations and war fighting.¹⁷⁹ Culturally, the Army recognized the need for shifting forces. It captured this in the concept of full spectrum operations and adopted versatility as its fifth tenant for all operations. Yet it did not recognize that the fundamental nature of versatility required a change in its organizational design.

By using Van Creveld's rules, this study uncovered that the essence of versatility is separation through rotation. A versatile organization has the capacity to shift capabilities to meet

¹⁷⁸ See Haffa, "Planning US Forces to Fight Two Wars: Right Number, Wrong Forces," 16 where he concludes the 50/50 split of Army divisions between the two MTWs inhibits rather than facilitates flexibility and development of military options.

¹⁷⁹ Neal, 23. Neal describes a strategic inflection point as the time in the life of an organization when the way it competes in and responds to the environment is undergoing fundamental change.

requirements. However, without rotation creating separation in time, specialization occurs. This study concludes specialization produces agile not versatile organizations.¹⁸⁰

This study also deduced that without some separation of purpose, task interconnectedness complicates the process of applying capabilities to requirements. For instance, responsiveness, a product of readiness brought about by training, is an embedded requirement for both the respond and the shape domains, but curiously not the prepare domain. The problem here is one of purpose. The purpose of the prepare domain is understood as transforming the force to meet a future peer competitor. Similarly, the shape domain shares a two-fold purpose; first to prevent war and secondly, if prevention fails, to deter escalation of the conflict. Lastly, respond also has a two-fold purpose. First, as in the shape domain, it attempts to deter conflict escalation and when deterrence fails, it must defeat the adversary. In sum, without alignment of purpose within the domains of shape, prepare and respond, there is no prioritization, and without prioritization, there is chaos.

In addition to separation of purpose, another important detail uncovered by this study was the improper alignment of training within the domains of shape, respond, and prepare. Field Manual 3-0, *Operations* captures the importance of training when it states “[T]raining is the linchpin of strategic responsiveness.”¹⁸¹ However, like purpose, training is an embedded requirement of both the shape and respond domains. Without separation and proper alignment, units must simultaneously train to achieve the capability of accomplishing SSC deterrent shape missions, as well as MTW respond missions. As noted earlier, this over tasking actually reduces capabilities, while weakening strategic responsiveness.

The U.S. Air Force broke the mold on this duality of purpose and training. By prioritizing training within the prepare domain, the Air Force effectively balances the demands of

¹⁸⁰ Ibid, 22.

¹⁸¹ FM 3-0, pg 3-11.

the current environment with those of the future.¹⁸² This becomes clearer when AEFs assume the missions of the respond and shape domains only after they complete collective training. More importantly, the Air Force prioritizes this duality by maintaining a general-purpose force structure that rotates between security tasks. While not the optimal solution, it does satisfy the demands of an uncertain changing environment.

The Army's capstone doctrine manual also recognizes the importance of properly aligning training within the context of shape, respond, and prepare. However, concluding that strategic responsiveness only requires the readiness to deploy, coupled with personnel and equipment maintenance is not enough. *A readiness posture born of unit mission readiness cycles* that provides combatant commanders with units who have completed collective training and whose equipment is configured for deployment imparts the responsiveness today's complex environment demands.¹⁸³ It is understood when FM 3-0 talks about readiness cycles it talks about a rotation similar to the cycle proposed by the authors of the initial entry crises response force option examined in chapter four. Additionally, use of mission readiness cycles follows the "rule of threes" so painfully learned over the past decade.

From these conclusions, it is this author's belief that application of the "rule of threes" can serve the Army as the foundation for building a rotation cycle. This is similar to the Air Forces' position that not more than twenty percent of the combat and combat support force will participate in operational deployments at any one time. By applying the "rule of threes" when generating forces for a new mission, the requirement's true impact is weighed against the Army's capabilities. Thus, it should serve to prioritize which requirements the Army is capable of accomplishing based upon comparing the risks of assuming a new mission with the risks imposed upon current missions. Combining "the rule of threes" with the practice of mission readiness cycles at the corps level will not only produce the separation of tasks in time and purpose, but

¹⁸² 2001 QDR, 13.

¹⁸³ FM 3-0, pg. 3-2.

also introduces the rotation required to meet the demands of a shifting uncertain security environment.

The Army is a complex adaptive system, forced to operate within a continuously changing environment. The plethora of studies, papers, and reports point to an organization looking for new ways and means to adapt to the implications of this new environment. Methods like FORSCOM's Balkans Sourcing Strategy, Vinson's mission-focus structure, and the Initial Entry Crisis Response option represent some of the effort. While not perfect, each offers advantages for inclusion in a new model based upon the Air Force's AEF.

Recommendation: An Organizational Model of Rotating Forces Between Requirements

This monograph has two fundamental recommendations. First, from a sizing perspective, DOD needs to retain the capability to fight and win two nearly simultaneous MTWs. However, a sound strategy that seeks to prevent, and then deter escalation where prevention fails, and finally defeat the adversary when deterrence fails, keeps this capability from becoming a requirement. The uncertainty of the post-cold war international environment saw sequential shooting wars, an MTW; emerge in Southeast Europe and Central Asia. Yet, forward presence in Korea, ongoing contingency operations in and around Iraq, and effective combat operations during the first MTW, combined to ensure that the capability to prosecute a second MTW capability did not turn into a requirement. Thus, this monograph supports DOD's modification of the two MTW construct; by embracing a functional two MTW concept, that minimizes the previous geographic focus of traditional hotspots. This change, just one component of the larger strategy of engagement, better positions the services to respond to an uncertain international environment.¹⁸⁴

¹⁸⁴ See 2001 QDR, 17-21. This document recognizes the problems with "optimizing for conflict in two particular regions – Northeast Asia and Southwest Asia", demanding the services "build[ing] a portfolio of capabilities that is robust across the spectrum of possible force requirements, both functional and geographical," so that "U.S. forces will remain capable of swiftly defeating attacks against U.S. allies and friends in any two theaters of operation in overlapping timeframes."

The second recommendation relies upon adoption of the first. Namely, the recommendation is for the Army to adopt a model that separates forces and tasks in time *and* purpose, achieved by rotating a general-purpose conventional force structure through the shape, respond, and prepare domains of the nation's military strategy. As such, this recommendation focuses on aligning the force to mission domains. This model follows Van Creveld's third rule. It distributes uncertainty by dividing the Army's overarching task and establishing forces capable of executing missions separately on a semi-independent basis. However, this proposal modifies Van Creveld's rule by *rotating* the force through the mission domains to achieve the versatility required of today's uncertain environment demands.

The foundation of this model rests upon three corps rotating sequentially through each domain. To realize this, the present alignment of forces within the corps must change. Gone would be the all heavy III and V Corps. XVIII Airborne corps would lose some of its light divisions. I Corps would convert to an institutional headquarters, implementing and certifying the transformation of the legacy force to the Interim Brigade Combat Teams (IBCTs) and the Objective Force. What emerges is three balanced, operational corps headquarters each with the combat power of approximately three divisions. Figure 5.1 depicts how this force might look.

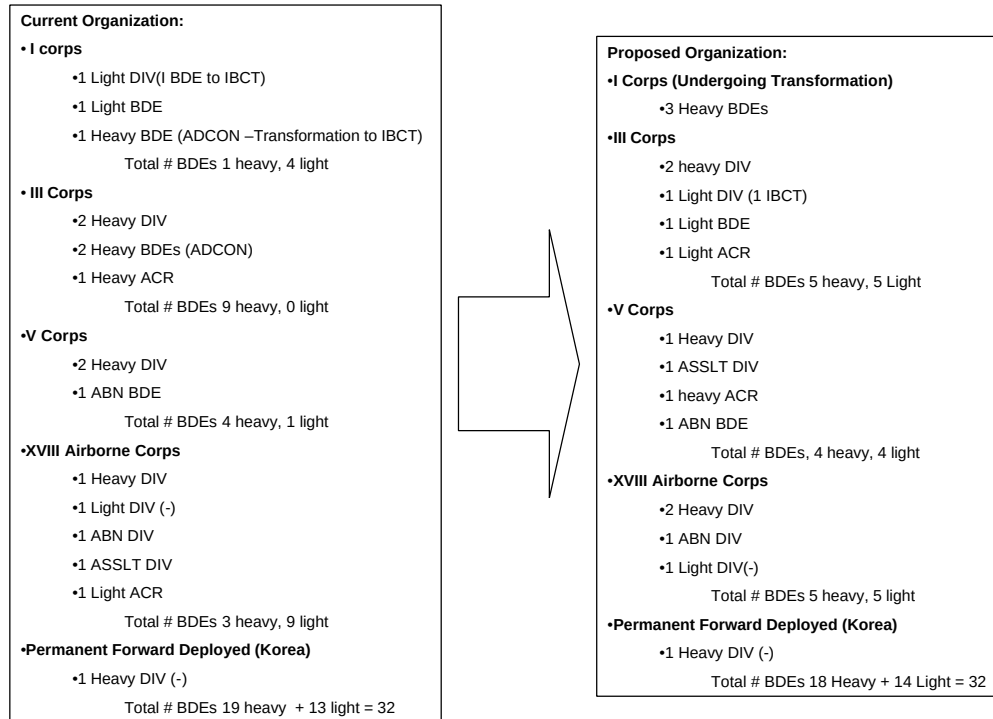


Figure 5.1 Proposed Alignment of Combat Brigades, Divisions, and Corps

With a balanced alignment, each corps has a mixture of force that habitually works together, easing the impact of ad-hoc force generation. While not shown, this proposal also demands a balancing of corps level combat support and combat service support units. Therefore, as all corps have both light and heavy forces and a balance mixture of enablers, their capabilities increase. Now, each corps can respond rapidly with light forces followed by reinforcing heavy forces as required.

Additionally, like the Air Force’s AEF concept, this alignment does not require any movement of units to new posts. Current communications and reach back capabilities, demonstrated over the last decade, allows for command and control of forces not co-located with the higher headquarters. This alignment would end the current practice of III Corps having administrative control (ADCON) over two V Corps brigades stationed at Fort Riley. With transformation ongoing, there would be some “movement” of units. On a one for one basis, units

would rotate out of the operational force structure, complete transformation to include certification, and then return to the corps of origin as a more capable force. Now that an alignment of generally balanced forces is established, alignment of tasks within the mission domains begins.

Any model of the domains must address the problems with purpose overlap. In this model, each domain identifies two purposes labeling them level 1 and level 2. Similarly, each level identifies specific missions that achieve the level's purpose. Requirements are reduced with the nesting of purposes in a single domain, aligning them to the capabilities of smaller sized corps. Figure 5.2 demonstrates purpose and task nesting within the domains of shape, prepare, and respond, and depicts the rotation within the cycle.

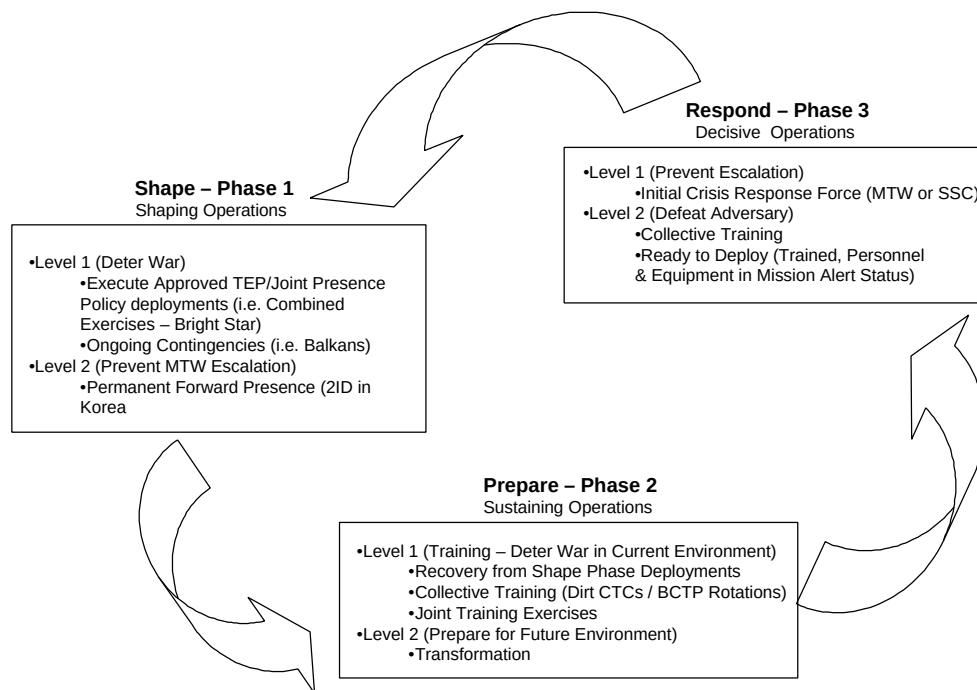


Figure 5.2 Mission Domains and Rotation Scheme

The cycle depicted in figure 5.2 takes three years to complete. Each corps then is responsible for the missions within its domain for a one-year period. When the year is up, corps rotate to the next domain.

The cycle's length achieves two effects. First, it tells soldiers when they might deploy. Soldiers understand the highest probability of an operational deployment will occur in the shape domain, followed by a lessened chance within the respond domain. The effect achieved is localized OPTEMPO. Hypothetically, the average soldier would deploy probably no more than nine months during the shape domain, and potentially up to six more months during the respond phase. Of course, these numbers are dependent upon the number and type of missions. However, when viewed over the entire three-year period, fifteen months equals 390 days deployed out of a total of 1080 days.

The second effect of this three-year cycle is some alignment with PERSTEMPO. Soldiers and Officers average three-year assignments. With this in mind, each soldier would complete a cycle executing a variety of missions within each domain, gaining full spectrum experience. However, this does not solve the current problem of soldiers potentially performing back-to-back deployments when reassigned to a new corps.

A closer look at figure 5.2 shows the missions within each domain. Here, examination of the model in two scenarios, steady state and escalation, bears scrutiny. Steady state here means operating near the edge of equilibrium, say between the first and second bifurcation. Escalation refers to the area of complexity between the third and fourth bifurcation, closer to the edge of chaos.

In phase one, the shape domain, the assigned corps is executing approved shaping missions on one level. Examples include missions identified in a CINC's approved theater engagement plan, or ongoing contingency operations such as those in Bosnia and Kosovo. The second level includes the permanently forward deployed 2nd ID in Korea. The purpose of this

force is to deter resumption of a MTW on the Korean peninsular. Together, these two levels shape the international environment by deterring war.

Phase two, the prepare domain, has a corps executing training missions designed to meet the demands of the current and future environment. Examples include unit collective training, designated joint exercises, and approved combined exercises identified in a CINC's theater engagement plan. The goal of this level one training is certified units prepared to execute respond missions when the corps rotates to that phase of the cycle. The second level focuses on transformation to meet the demands of an evolving future.

Phase three, the respond domain, has a corps executing initial crisis response. Here, there is no separation between SSC and MTW scenarios, the force simply responds to emerging challenges in the international environment. When no crisis exists, training for assumption of specific missions in the shape domain occurs. Combined these missions work to deter war, and defeat an adversary if deterrence fails.

After reviewing what steady state operations might look like, scrutiny of an escalation to meet the requirements of an MTW scenario follows. Instead of the current method of tasking to generate forces, the corps operating in the respond domain deploys to augment any forces already in theater, becoming the halt force. Those forces in the prepare domain, complete mission specific training and prepare their equipment for deployment while the respond force has priority on strategic lift. As lift becomes available, these forces would flow into theater forming the counteroffensive force. In keeping with the new construct, those forces in the shape domain, would stay on task, deterring the emergence of a second nearly simultaneous MTW. Once the crisis is over, the force would shift to the left, eventually returning to a steady state between the first and second bifurcation.

Of course, to realize this shifting between bifurcations requires analysis of risk versus gain. Separation of the force and missions in time and purpose lays the groundwork for developing versatility. However, without balancing the risks to ongoing operations and the force

as a whole, with the potential gains realized from a new mission, an over worked force quickly loses its strategic responsiveness.

In the end, this model offers the Army a way to distribute the uncertainty of a changing security environment. The foundation of this model, the rule of threes creates the critical separation in *both* time and purpose required to maintain versatility. Furthermore, it serves as feedback, allowing the Army to sense change in its environment. This ability is critical to the survival of complex adaptive systems as it allows spontaneous self-organization. In short, this model offers the Army a way to adapt and evolve with its environment and to stay relevant across the spectrum of conflict.

Implications

This model is feasible, suitable and acceptable, yet as with anything, there are implications. The first implication of this model is that it takes FORSCOM out of the force generation business. Conceivably, Department of the Army, FORSCOM, Joint Forces Command, and regional CINCs would no longer ask for a specific force. Instead, they would ask for an effect, and let the corps figure out how to meet the request.

While on the subject of effects, another implication this model brings to light is forced entry capability. The Army's forced entry capability currently resides in two divisions, the 82nd Airborne Division, and the 101st Airborne Division (Air Assault). In this model, there is no third forced entry capable division. Thus for a year the Army's ability to meet this requirement is limited without creating a third forced entry capable division. One potential answer is to accept this capability shortfall. The U.S. Marine Corps, a force entry capable organization can provide this critical capability when III Corps is in the respond domain. Additionally, as IBCTs complete certification, they will return to the force possessing a forced entry capability. Whatever the answer, the fact that not all corps would have a forced entry capability warrants further research.

With this model, the Army now joins the ranks of those who manage requirements through a rotation-based strategy. Now, the potential exists to organize rotating forces into some sort of standing Joint Task Force (JTF) for employment during an initial crisis response. With a plan that aligns the service rotations, there exists the possibility for dedicated joint training before this joint force assumes responsibility in the respond domain. No matter how one views rotational schedules, once the Army joins the ranks of rotating requirements between the force, it generates opportunities for further research.

Some final thoughts framed as questions. Where do reserve component forces fit into this model? Where do echelons above corps combat service and combat service support forces fit into this model? One potential answer lies in how the Air Force does business, treating operational deployments as training. For Army forces, a greater overlap between the tasks critical to a unit's mission in peace operations and its mission in war means less skill specific training required. This also holds true for the Army.¹⁸⁵ Also, like the Air Force, low density high demand (LD/HD) Army assets could rotate between just two domains, shape and respond. A final question, what impact on the Unified Command Plan (UCP) does this pose? To implement this model requires removing the majority of Army forces from assignment to specific CINCs. Obviously, this will impact production of theater engagement plans (TEPs), requiring more planning to achieve the forward presence in those regions that lose their assigned forces.

In the end, this plan is about trade-offs. It offers a method of narrowing the gap between requirements with capabilities so that the complex adaptive system, that is the Army, can adapt to a changing security environment. With a capability to sense changes in its environment, the Army can adapt by shuffling along the spectrum of complexity, providing the nation with a force that is full spectrum, fully capable, all the time.

¹⁸⁵ Laurinda Zeman, Delia Welsh, Christopher Jehn, and William Thomas. "Making Peace While Staying Ready for War: The Challenges of U.S. Military Participation in Peace Operations." (Congressional Budget Office: GPO, December 1999), section 5, chapter 3, pg 8. [Online] available at <http://www.fas.org/man/congress/1999/cbo-pko>. Accessed 16 January 2002

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