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NAVAL POSTGRADUATE SCHOOL

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THESIS

THE GENESIS OF TRANSFORMATION: THE RISE OF THE UNITED STATES ARMY'S MODULAR BRIGADE COMBAT TEAMS

by

Jason A. Pardee

March 2013

Thesis Advisor: James Russell Second Reader Daniel Moran

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THE GENESIS OF TRANSFORMATION: THE RISE OF THE UNITED STATES ARMY'S MODULAR BRIGADE COMBAT TEAMS

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Submitted in partial fulfillment of the requirements for the degree of

MASTER OF ARTS IN SECURITY STUDIES (DEFENSE DECISION-MAKING AND PLANNING)

from the

NAVAL POSTGRADUATE SCHOOL March 2013

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ABSTRACT

Beginning in 1999, the Army pursued a transformation effort that would span over a decade and produce a changed force structure that relied upon the brigade combat team as the service's focal conventional fighting force. Two decisions loomed large in the Army's direction away from the division as its combat force building block. This thesis examines both the decision to create the Stryker Brigade Combat Team as part of General Eric Shinseki's vision for Army transformation, and General Peter Schoomaker's decision in 2003 to focus change on the creation of a modular force. These decisions are investigated through three hypotheses that are based in military innovation theory. The hypotheses contend that the Army's decisions can be explained by either change in the security environment, by intervention on the behalf of civilian leaders external to the service demanding change, or by innovative thinking and leadership by the Army's senior uniformed or civilian leaders. This thesis finds that elements of each hypothesis were present in each decision, but that the impact of the security environment appeared as a strong causal factor in the Army's movement toward modularization throughout the examination of the entire time period.

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LIST OF ACRONYMS AND ABBREVIATIONS

AAN Army After Next

ACR Armored Cavalry Regiment

ARS Armored Reconnaissance Squadron

BCT Brigade Combat Team

BSB Brigade Support Battalion

BSTB Brigade Special Troops Battalion

CAB Combined Arms Battalion

CMTC Combat Maneuver Training Center

CS Combat Support

CSS Combat Service Support
CTC Combat Training Center
DA Department of the Army

DISCOM Division Support Command

DIVARTY Division Artillery

DoD Department of Defense FCS Future Combat System

FY Fiscal Year

GAO Government Accountability Office

GWOT Global War on Terrorism

HBCT Heavy Brigade Combat Team

HTLD High-Tech Light Division

IBCT Infantry Brigade Combat Team

ID Infantry Division

NATO North Atlantic Treaty Organization

NBC Nuclear, Biological, Chemical

NDP National Defense Panel

NDS National Defense Strategy

NMS National Military Strategy

NSS National Security Strategy

NTC National Training Center

OOTW Operations Other Than War

QDR Quadrennial Defense Review

RSTA Reconnaissance, Surveillance, and Target Acquisition

SBCT Stryker Brigade Combat Team

SECDEF Secretary of Defense

TRADOC U.S. Army Training and Doctrine Command

UA Unit of Action

UE Unit of Employment

ACKNOWLEDGMENTS

I would like to thank Professors James Russell and Dan Moran for the feedback, advice, and guidance during this endeavor. Although I had experienced Stryker transformation firsthand as a young officer, I had not considered researching the factors and influence behind the Army's decision to change. One quick conversation with Professor Russell changed that, and his idea and research regarding military innovation led me to this project. While this thesis did not uncover any earth-shattering new developments on the subject of innovation, I hope that it will at least reflect the top-notch education I've gained by learning from Professors Russell, Moran, and others in the National Security Affairs Department.

This project would not have come together without the support from my wife. Jenny was the one prodding me to start working on this thesis, and was understanding when I spent countless days at the library putting this paper together. Further, Jenny has had the painful experience of reading and re-reading each and every chapter that follows. Without her expert eye, editing would have been much more difficult. So, to Jenny I say, thank you for all of your help, love and support the past seven-plus years. Coming home to you and Jackson highlights my each and every day. I love you.

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I. INTRODUCTION

Since its inception, the United States Army (hereby known as U.S. Army, or Army) has experienced many changes to doctrine, technology and force structure. However, one constant feature of the post-World War II Army was that the combat division remained the focal unit within the force structure until the early 21st century. This thesis seeks to determine the cause of transformation that resulted in an Army that no longer relied upon large divisions, to a force that centered on modular brigade combat teams (BCT). Although the initial stages of transformation may be rooted in General Eric Shinseki's peacetime decision to create the Interim Brigade Combat Team (later redesignated the Stryker Brigade Combat Team, or SBCT), directing a complex organization that is steeply entrenched in service traditions toward the modular BCT concept while engaged in conflict only makes the question that more interesting.

A. IMPORTANCE

Military organizations are generally regarded as being resistant to change, especially if such a change involves significant innovation. Yet, military organizations have changed, and can be expected to continue to do so in the future. Although it is beneficial to understand how the end result of change and innovation impact an organization's ability to accomplish its goals, the issue of greater importance may be rooted in the understanding of why an organization decides to change in the first place. This is especially true for a large bureaucracy such as the Army that may be not only hard to change, but also may be "designed not to change."

Much of the research and literature regarding change and innovation tends to hypothesize through the delineation of peace and war, as well as through the influence of intra-state bureaucratic processes or the impact of factors external to the state. The case of recent U.S. Army transformation is unique because it spans through both peace and war. Further, the move to modularization occurred during two different presidential

¹ Stephen Peter Rosen, Winning the Next War (Ithaca: Cornell University Press, 1991), 2.

² Ibid.

administrations, and under the leadership of two defense secretaries.³ In searching for the answers to determine the cause of Army transformation toward a modular BCT-centric force, a number of significant elements will be explored. Chief among these are the importance of civil-military relations and the influence of the strategic security environment on civilian and military leaders. While this thesis will not predict when the next change or innovation can be expected to occur, it strives to understand the drivers of change and how military leaders can foresee the need to innovate due to the number of factors that pressure the organization.

B. LITERATURE REVIEW

Academic literature concerned with military innovation offers diverse explanations regarding both the need for, and the sources of, change. This literature review will examine seven works that offer theories and examples of innovation since the early 20th century. Three works: Deborah D. Avant's, *Political Institutions and Military* Change, Barry R. Posen's, The Sources of Military Doctrine: France, Britain, and Germany Between the World Wars, and Stephen Peter Rosen's, Winning the Next War consist of the core that looks to provide military innovation theory. Brian McAllister Linn's, The Echo of Battle: The Army's Way of War, and Military Innovation in the Interwar Period, edited by Williamson Murray and Allan R. Millett, build upon the core works and reinforce existing ideas or offer new thoughts that are relevant to the study at hand. Finally, James A. Russell's, Innovation, Transformation, and War: Counterinsurgency Operations in Anbar and Ninewa Provinces, Iraq, 2005-2007, and Chad C. Serena's, A Revolution in Military Adaptation: The U.S. Army in the Iraq War are recent additions to existing literature that illustrate contemporary examples of innovation and offer new ideas regarding the sources of change.

The remainder of the literature review aims to do the following. First, the three core sources will be investigated thoroughly and the remaining works will be briefly

³ This based upon the assumption that the initial move toward transformation can be traced to 1999 with the creation of the SBCT under President William Clinton and Secretary of Defense William Cohen, and that the shift toward modularization started in 2003 under President George W. Bush and Secretary of Defense Donald Rumsfeld.

explored to determine each of the main points as they relate to military change and innovation. Second, all of the works will be summarized according to any similarities or differences between them. Finally, this literature review will conclude by evaluating the overarching state of knowledge, paying close attention to any significant problems or knowledge gaps.

1. Innovation: Theories and Ideas

Of the relevant works concerning innovation and change, Barry R. Posen's *The Sources of Military Doctrine*, offers the most expansive hypotheses, many of which have been challenged by others. On the surface, the title reference to doctrine suggests that Posen's work is not relevant to a change in force structure. However, Posen notes that "military doctrine, particularly the aspects that relate directly to combat, is strongly reflected in the forces that are acquired by the military organization," and is thus germane to the study at hand. ⁴ Through the lens of two longstanding structural theories, those of organization and balance of power, Posen offers three causes of innovation. ⁵

Organization theory suggests that three factors—the organization's purpose, its people, and the environment—influence change or stagnation. Balance of power theory, on the other hand, looks at the impact of state external pressures, mainly security concerns from existing or potential adversaries, on internal state decisions. From these theories, Posen offers three explanations of innovation. The first cause proposed is that "organizations will innovate when they fail." Posen's second cause for change is rooted in the belief that a military organization will innovate because it is made to do so by external pressure, mainly from the state's civilian leadership. The final explanation for innovation is that an organization will do so if it wants to grow in size or power. Although Posen's work does not authoritatively propose that one cause reigns supreme

⁴ Barry R. Posen, *The Sources of Military Doctrine: France, Britain, and Germany Between the World Wars* (Ithaca: Cornell University Press, 1984), 14.

⁵ Ibid., 34–38.

⁶ Ibid., 40–43.

⁷ Ibid., 47.

⁸ Ibid.

over the others, it does propose that two sources are most likely. Within organization theory, military failure and civilian intervention are the chief sources of innovation. Balance of power theory suggests that change is most easily influenced by civilian intervention, but also that fear caused by "events in the external environment," increases a military organization's openness to innovation.⁹

Deborah D. Avant's, *Political Institutions and Military Change* builds upon the structural theories that Posen used to formulate his argument. Avant adds international, domestic, and institutional theory to the equation when looking at military change. According to international theory, "military organizations should balance (or create appropriate doctrine) in response to external threats." International theory differs from balance of power theory in that the latter contends that the military organization itself will innovate, whereas the former suggests that civilian intervention is a key catalyst for change. Domestic theory is concerned with internal organizational politics and bureaucratic processes that impact decision making. Institutional theory, similar to organizational theory, is concerned with the power that an organization has or seeks. However, institutional theory differs in that it suggests that actors will behave in ways that reward responsiveness to civilian leaders, and not behave in inflexible ways as organizational theory predicts. In

While Avant notes that "military organizations should prefer offensive doctrine and be reluctant to change," and that "civilian leaders should be more attuned to the demands of the international system and should intervene to force change if the threat is significant enough," she primarily contends that "civilian intervention is neither a necessary nor a sufficient condition," for innovation. Thus, according to *Political Institutions and Military Change*, most innovation is the result of institutional theory, when "military organizations will be responsive to civilian goals when military leaders

⁹ Ibid., 75, 224.

¹⁰ Deborah D. Avant, *Political Institutions and Military Change* (Ithaca: Cornell University Press, 1994), 2.

¹¹ Ibid., 2–6.

¹² Ibid., 19, 5.

expect to be rewarded for that responsiveness." Although Avant notes that some civilian intervention has been successful, she suggests that the best way to effect change is found in policymaker's abilities to cue military leaders in to which changes will be rewarded most handsomely. ¹⁴

Stephen Peter Rosen's, *Winning the Next War* looks at military innovation from a different perspective. Like the works examined above, Rosen makes extensive use of case studies but looks at them through the prism of peacetime and wartime changes. Innovation during periods of peace is expected to occur when senior uniformed officers devise a plan to do so, "which has both intellectual and organizational components." Wartime innovation, aside from the obvious, differs from peacetime innovation in that military organizations "have less the character of stable political communities...and more the character of a functioning bureaucracy that has the strongest possible incentives to learn rationally from its experiences."

Rosen asserts that peacetime innovation is slower to implement than wartime innovation. In searching for the main cause of peacetime innovation, the most important factor that drive military leaders to act is found in changes to the international or strategic security environment. Although wartime innovation is usually faster in relation to peacetime change, Rosen notes that the latter is no easier to accomplish than the former. Equating wartime innovation with changes to "measure(s) of strategic effectiveness," the source of military innovation are found mainly in the organization's perceived need to implement new tasks and concepts of operation that will make the force more likely to be successful.¹⁷ Although both peacetime and wartime innovation occurs under different

¹³ Ibid., 130.

¹⁴ Ibid., 140.

¹⁵ Rosen, Winning the Next War, 21.

¹⁶ Ibid., 22.

¹⁷ Ibid., 110.

conditions, one constant that Rosen suggests is that innovation during both periods is often the result of the identification of the need, and a desire to change which stems from respected senior military officers.¹⁸

Contributing to the foundational works of Avant, Posen, and Rosen, from which this literature review is built upon, are the contributions from Brian McAllister Linn, Williamson Murray, and Allen Millett to the subject of military innovation. Of the three authors, Linn's *The Echo of Battle* strays furthest, but not completely away, from earlier explanations of change. Looking back at the Army from its inception, Linn does not propose a new theory of innovation. Looking at cases such as the Army's experiment with the Pentomic Division in the 1950s, and the failures in Vietnam, Linn's focuses on the actions of Army senior leaders and how they fostered or stymied innovation. ¹⁹ Noting that the service has been often ineffectual at changing to meet new security demands, Linn's main thrust of his argument is aligned with organization theory in that "the army's way of war has been shaped as much or more by its peacetime intellectual debate as by its wartime service."

Military Innovation in the Interwar Period, edited by Murray and Millett, is built upon the assumption "that innovation is natural and the result of a dynamic environment in which organizations must accept change if they are to survive," and that "changes are inevitable given the technological developments occurring in civil society." Despite the assumption that innovation is natural, Murray adds two theories of change. The first, revolutionary innovation is described as a result of top-down driven change that requires "leadership that is well-informed about the technical, as well as conceptual aspects of

¹⁸ Ibid., 21, 34, 109–110, 252–253.

¹⁹ Brian McAllister Linn, *The Echo of Battle: The Army's Way of War* (Cambridge: Harvard University Press, 2007), 177–185.

²⁰ Ibid., 234.

²¹ Williamson Murray and Allan R. Millett, "Introduction," in *Military Innovation in the Interwar Period*, ed. Williamson Murray and Allan R. Millett (Cambridge: Cambridge University Press, 2006), 5; Williamson Murray, "Innovation: Past and Future," in *Military Innovation in the Interwar Period*, ed. Murray and Millett, 301.

possible innovation."²² Murray's idea of evolutionary innovation suggests that military change is a significant undertaking that takes a great deal of time. Noting that evolutionary innovation is the most likely type of change, it is characterized a "complex process involving organizational cultures, strategic requirements, the international situation, and the capacity to learn realistic, honest lessons from the past as well as present military experience."²³

Chad C. Serena's, A Revolution in Military Adaptation and James Russell's Innovation, Transformation, and War both look at recent change that the American military experienced during conflict in Iraq. Serena argues that recent history and security policy shaped the way the U.S. Army would organize, train, and fight, and subsequently how it would change. Serena further asserts that prior decisions regarding force structure, strategy, and assessments regarding the international security environment made the Army more rigid and resistant to change. Although no new theory regarding innovation is advanced, the main argument as related to the overarching subject of military change proposes that any recent efforts prior to the 2003 invasion of Iraq were driven by the "incorporation of technological capabilities." Serena does note that while some civilian intervention occurred, changes to the strategic environment were mostly ignored.²⁴ When examining the adaptive efforts of the Army in Iraq, Serena argues that innovation was decentralized, and that it "occurred by necessity." ²⁵ Russell's work argues along similar lines as Serena's piece. Noting that some recent examples of military change were the result of top-down directives through civilian intervention, Russell proposes an alternative theory of innovation. Citing the counterinsurgency successes from lower level organizations, Russell asserts that one of the most recent, successful cases of military innovation was the result of bottom-up driven best practices that "led the Defense

²² Murray, "Innovation: Past and Future," in *Military Innovation in the Interwar Period*, ed. Murray and Millett, 306.

²³ Ibid., 308.

²⁴ Chad C. Serena, *A Revolution in Military Adaptation: The U.S. Army in the Iraq War* (Washington, DC: Georgetown University Press, 2011), 1, 4, 25–26,47.

²⁵ Ibid., 160.

Department's rear-echelon to reorient the organizational capabilities of American ground forces toward irregular warfare and counterinsurgency."²⁶

2. Theoretical Similarities and Differences

Generally, there is consensus from most scholars regarding the potential catalysts for military innovation. All of the works examined above agree that external pressure, namely from civilian leaders can spur change. Further, defeat or the threats of defeat during wartime, and changes to the security environment are also identified as a potential driver of change. Last, all of the authors note that change originating from within a military organization is possible. While there is agreement regarding the possible explanations for innovation, there is little consensus regarding which of the factors is the most likely cause.

Posen argues most strongly that civilian intervention is one of the greatest drivers of innovation. Serena and Russell also identify civilian intervention as leading causes of innovation in some recent examples, yet both works look toward sources of innovation from within an organization as the major source of change. Murray also advocates that civilian intervention is a major driver of revolutionary innovation, similar to Posen's idea regarding wartime change, but notes that cases of revolutionary innovation are extremely rare. Deborah Avant and Stephen Peter Rosen note the possibility of civilian intervention as a source of innovation but argue most strongly against it. Avant, by proposing that institutional theory best explains change, asserts that senior military leaders that feel they will be rewarded for being responsive to civilian desires have the most impact on innovation. Rosen also notes the influence of respected military officers, but he asserts that their understanding of the strategic environment is the most likely cause of innovation.

Brian McAllister Linn, Williamson Murray, and Allen Millet offer explanations for innovation that fall outside of the two categories discussed above. Linn proposes that much of the meaningful change that the Army has experienced has been because of

²⁶ James A. Russell, *Innovation, Transformation, and War: Counterinsurgency Operations in Anbar and Ninewa Provinces, Iraq, 2005–2007* (Stanford: Stanford University Press, 2011), ix.

professional, intellectual discussions during peacetime. Murray and Millet propose that innovation is inescapable, and that any organization that wishes to survive must do so. However, of all the possible justifications, Murray's evolutionary innovation is the most expansive. It encompasses concepts that all the other possible explanations cite as driving factors. However, because Murray concedes that evolutionary innovation takes such a great deal of time, it is hard to determine where change starts and normal organizational progression ends.

3. The State of Knowledge

The state of knowledge regarding military innovation includes a number of complementary and competing theories and ideas. While no theory or idea can provide an answer for every example of military innovation, for every case, one reason can reasonably explain why change took place. However, aside from the works from Linn, Serena, and Russell, much of what has been written uses examples that date only as recent as the Vietnam War, while many examples are cited from the interwar period and from World War II. This does not mean that these theories and ideas are no longer applicable, as they still offer reasonable explanations for innovation.

Although no significant gaps exist in the current literature regarding innovation, one of greatest problems is that most theories are limited by the reliance on one of the possible causes. Williamson Murray's hypothesis of evolutionary innovation takes the most steps to guard against a theory that relies only on one cause, but since it assumes that innovation must take a great deal of time, it is less useful to explain rapid innovation. Because innovation is likely the result of any number of factors, a more multidimensional approach the problem should emerge. Military failure may spur civilian intervention, which in turn accelerates senior military officers to take action to preserve power, and satisfy the state's security needs. However, no such theory or idea exists that could offer such a complex response to a multifaceted question.

C. PROBLEMS AND HYPOTHESES

The Army's decision to move away from a division-centric force toward the modular BCT concept raises a number of inter-related issues to the central question of

why it did so. What conditions changed within the Department of Defense (DoD) or within the Department of the Army (DA) that may have spurred or facilitated transformation? What impact did civilian leaders outside of the Army have on the service? What impact did the decision to convert selected units to Stryker Brigade Combat Teams have when the later decision to build a modular force was made? What did senior Army uniformed or civilian leaders understand about the strategic security environment? If these leaders sensed a change in the security environment, how did this impact modularization? The answers to many of these questions can help us understand why the Army made such a radical shift away from the division, however, it is unlikely that any one answer may do so alone.

This thesis will be built upon three hypotheses that are influenced by much of the important literature regarding military change and innovation. The first hypothesis argues that the Army's move toward modularization was a response to a changed or changing security environment or to changes to the service's roles and missions. A second hypothesis suggests that the Army's decision to change the force structure was the result of civilian intervention that forced the transformation. The third hypothesis contends that change occurred because of innovative leadership or thinking from the Army's senior uniformed or civilian leaders. It is possible that evidence from any one hypothesis may be insufficient to answer the question. However, by exploring each hypothesis and the interrelation that the core idea of each has upon the others, an answer will emerge.

This thesis finds that evidence from each hypothesis appeared in both the Army's decision to create the SBCT and in the shift in focus toward the modular BCT. In the case of the creation of the SBCT, the impact of the security environment and changes to the Army's roles and missions appeared as the strongest causal factor. Evidence of innovative leadership and thinking also was found as a likely explanation but to a lesser degree. Some evidence of civilian intervention was also discovered, but this factor was found to be the weakest of the three. In the case of the Army's shift in transformation focus that led to creation to the modular BCT, civilian intervention appeared to be the strongest causal factor. The impact of the security environment also appeared to influence the civilians demanding change as well as the Army in its decision. While some evidence

of innovative thinking and leadership from senior Army leaders was observed, its impact was weaker than either of the other two factors.

D. THESIS OVERVIEW

The remainder of this thesis is organized into four Chapters. The second Chapter utilizes a historical study to demonstrate the difference in the force structure between the pre- and post-transformational Army and document how it changed. This will be done by examining official Army documents such as the 2004 Army Transformation Roadmap and the Army Guide to Modularity Version 1.0. External documents and reports such as the RAND Corporation's A Review of the Army's Modular Force Structure, and Richard L. Kugler's "Case Study in Army Transformation: Creating Modular Forces," provide further background information and analysis that documents the change in the force structure and capabilities that modularization brought.

Chapters III and IV consist of case studies looking at the decisions that created the SBCT and the modular force. Here the decision will be analyzed through each of the hypotheses to determine which provided the best explanation for change in each instance. Documents such as the *Quadrennial Defense Review Report* from 1997, 2001, and 2006 will be used to examine the relation between the Department of Defense and the Army, and perceptions about the strategic security environment, and to determine whether official documents had an impact on the decision to transform. These case studies will also look to congressional testimony, public speeches and interviews with senior civilians and to Army leaders to see what the decision makers of the times were saying about military change. The fifth and final Chapter explores the results of the case studies found in Chapters III and IV. Here, the conclusions drawn from the research are analyzed to determine consensus among the hypotheses in relation to Army transformation over the period from 1999 through 2005.

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II. ARMY TRANSFORMATION: THE STRYKER BRIGADE COMBAT TEAM AND MODULARIZATION

In the twenty years since Operation Desert Storm, the U.S. Army has undergone significant changes to its force structure. The Army that defeated Iraq in 1991 was centered on division-sized units of mainly two types: heavy and light. The heavy divisions that consisted of mechanized infantry and armored brigades proved their usefulness against another heavily armored foe, but their inability to quickly deploy in world-wide contingencies proved to be their Achilles heel. Light units had a more limited role in Iraq's defeat in 1991, and while they could be quickly deployed, they lacked mobility and heavy weapons. As a result of the shortcomings of the Army's two centerpiece conventional units, General Eric Shinseki, while serving as the Army Chief of Staff, set his service on a course of transformation and modernization in 1999. Central to Shinseki's vision was the creation of the interim brigade combat Team (later redesignated the Stryker Brigade Combat Team); a unit that could leverage the mobility, and survivability of heavy units, and also be light enough to rapidly deploy. The Army has since transformed eight active duty units and one National Guard unit from light or heavy brigades to SBCTs while fighting wars in Iraq and Afghanistan.

While the decision made in 1999 to transform some heavy and light brigades to SBCTs was important to give the Army an additional capability, it only impacted a small segment of the force. In 2003, Shinseki's successor, General Peter Schoomaker decided to "create a more effective fighting force by moving the Army from a division-based to a brigade-based structure." As a result, the Army transformed its entire active-duty conventional fighting force to modular brigade combat teams during a six-year period. Transformation did not start and stop with the modular BCT. Modularity ushered in an era where division and corps headquarters no longer held rigid command and control relationships between themselves and the subordinate BCTs. Further, the Army's logistical network underwent transformation to a modular support concept, where the

²⁷ Stuart E. Johnson, John Peters, Karin E. Kitchens, Aaron Martin, and Jordan Fischbach, *A Review of the Army's Modular Force Structure* (Santa Monica: RAND, 2012), 7.

BCT gained sustainment capabilities and support brigades were established to create tailored sustainment packages to support higher level commanders.

The Army's ability to execute transformation to the modular concept during a six-year period while fighting in Iraq and Afghanistan was nothing short of extraordinary. This Chapter aims to review where the Army came from and where it went during its journey. While the Army did transform its sustainment capabilities, and its reserve forces, this Chapter will briefly focus on the conceptual and organizational changes to the division, and corps and more deeply investigate the emergence of the Army's centerpiece conventional fighting unit, the BCT (infantry, heavy, and Stryker). To do so, this Chapter will explore the pre-transformational Army as it stood to understand its composition and what it was doing before the wars in Afghanistan and Iraq. Next, the development of the SBCT will be discussed as it can be seen as a precursor to the transformation to modularity. Finally, the modular division, corps, and BCT will be explored to determine what changed to develop a more agile force.

A. THE PRE-MODULAR ARMY

According to Richard Kugler in his "Case Study in Army Transformation: Creating Modular Forces," "the Army force structure that existed in 2001, when transformation accelerated, reflected several decades of experience that took place during World War II, the Cold War, and the post-Cold War decade of the 1990s." While this section does not seek to investigate the entire pre-modular Army's late history, it does seek to determine how the service was structured and what it was doing in a broad sense. In doing so, this section will serve as benchmark to compare where the Army came from to where it went during transformation. A snapshot from 1999 will be used to illustrate what the pre-modular Army looked like because there are ample data regarding the activities and composition of the service, and it was the year Shinseki announced his decision to begin transformation.

²⁸ Richard L. Kugler, "Case Study in Army Transformation: Creating Modular Forces," Center for Technology and National Security Policy, 2008, 2.

In 1999, the active Army was composed of ten divisions and three separate brigades. As Kugler noted, the pre-modular force was a reflection of the recent past. Because of the experience of the Cold War and Operation Desert Shield/Desert Storm against Iraq in 1991, it is not surprising that six of the ten divisions were of the heavy variety. The Army's heavy divisions were named according to history and tradition, that is to say a heavy division could carry the title of an armored, infantry, or cavalry division. However, regardless of the designation, they were all formations that were based upon the M1 Abrams series tanks and M2 Bradley infantry fighting vehicles. The four light divisions were exclusively light infantry, although the 82nd Airborne Division and the 101st Airborne Division (Air Assault) did provide unique capabilities centered on parachute operations and helicopter assault operations. While no two divisions of any type were identical, they did maintain a number of similarities.

The typical division in 1999 consisted of three subordinate combat brigades, division artillery (DIVARTY, approximate to an artillery brigade), division support command (DISCOM, approximate to a support brigade), a reconnaissance battalion/squadron, and rotary-wing aviation, air defense, and engineer units as required. Because of this construct, the combat brigades relied upon the division for support (artillery, additional logistical support, engineers, etc.) as these functions were not found within the brigade. As such, the division was forced to task-organize units in an ad-hoc manner to ensure the combat brigades were supported to accomplish their assigned missions.³¹

The combat brigades that compromised the bulk of the conventional Army's fighting forces varied in composition in accordance with the division type they fell beneath. As such, there were seven distinct brigade types. The heavy brigades found within the heavy divisions were classified as either armored, or mechanized (infantry).

²⁹ For example, the 1st Cavalry Division, 3rd Infantry Division, and 1st Armored Division were all heavy divisions.

³⁰ Department of Defense, *Defense Almanac*, http://www.defense.gov/pubs/almanac/, under "General Purpose Force Highlights"; Department of the Army, *Army Posture Statement FY00* (February 1999), http://www.army.mil/aps/00/aps00.htm, under "Conventional Forces."

³¹ Christopher R. Liermann, "Restructuring the Division Support Command," *Army Logistics University*, http://www.almc.army.mil/alog/issues/MayJun03/MS862.htm.

Within the light divisions, there existed airborne, air assault, and light infantry brigades. While there were distinctly different types of brigades, they all shared some commonality. Generally, brigades were composed of three maneuver battalions and a brigade reconnaissance company/troop. While the light brigades were most similar in organization, the heavy brigades (armored and mechanized infantry) differed in name because of the number of associated subordinate battalions. As such, the forces assigned to an armored brigade included two tank battalions and one mechanized infantry battalion, whereas a mechanized brigade was made up of two mechanized infantry battalions and one tank battalion. 33

As noted earlier, there were three unique brigade-sized units that were not subordinate to any division headquarters, two of which were armored cavalry regiments (ACR). While the two ACRs were different in that one was light, equipped with high-mobility, multipurpose wheeled vehicles, and the other was heavy, equipped with M1 tanks and M2 cavalry fighting vehicles, they were similar in concept. Both ACRs were composed of three cavalry squadrons (battalion equivalent), which had three cavalry troops, an anti-tank company (light) or tank company (heavy) and a field artillery battery. The regiments also had their own organic rotary wing aircraft squadron, support squadron, military intelligence company, chemical company and engineer company. Like the SBCTs that would bridge the gap toward modular heavy and light BCTs, the premodular Army's armored cavalry regiments were self-supporting and sustaining organizations that could bring combined arms warfare to the battlefield.

During the late 1990s, the Army continued to rely upon the division and corps to provide the required assets so the service could remain prepared for a number of contingencies.³⁴ While the Army may have been prepared to employ such large forces, the notion of large unit employment did not match what the Army was actually doing. *The Department of the Army Historical Summary Fiscal Year (FY) 1999*, highlighted the

³² Tank and mechanized infantry battalions were comprised of four tank companies and four mechanized infantry companies respectively.

³³ Johnson and others, *A Review of the Army's Modular Force Structure*, 13; Kugler, "Case Study in Army Transformation: Creating Modular Forces," 7–9.

³⁴ Kugler, "Case Study in Army Transformation: Creating Modular Forces," 8.

service's major activities from October 1998 to October 1999. Because the United States was not fighting a major war, Combat Training Center (CTC) rotations garnered significant attention. The summary noted that nine combat brigades from the Army's heavy divisions deployed and trained at the National Training Center (NTC) at Fort Irwin, California. Another six combat brigades from heavy divisions conducted maneuver training at the Combat Maneuver Training Center (CMTC) at Hohenfels, Germany. Additionally, the CMTC hosted two mission readiness exercises for forces set to deploy to Kosovo.³⁵

In addition to training center rotations, Army forces and soldiers found themselves engaged in local training exercises, counter-drug operations as part of a Joint Task Force, and deployed to Bosnia, Kosovo, Saudi Arabia, the Sinai, and 77 other countries. In total, 109,000 soldiers were forward deployed from the continental United States, and 31,000 soldiers were engaged in operational deployments. Whether in the field for training or deployed abroad, some 126 units of varying size and type reported that their organizations spent more than 120 days away from their home station, while an additional 54 units reported being away for more than 180 days under the same criteria. The Army's FY 1999 summary noted that the force structure of ten active and eight reserve divisions did accomplish all of its required missions; "but doing so placed heavy demands on some units" because of "the number of annual deployments having more than tripled since the end of the Cold War when the Army fielded eighteen active and ten reserve-component divisions." ³⁶

In 1999, the Army exercised fifteen combat brigades in training center rotations, and deployed some 140,000 soldiers in eighty-one countries. Although Army divisions were forward deployed, no division deployed in mass for a contingency operation. The Army's major contingency operation of 1999 was in illustrative example of the waning usefulness of the division as the building block for combat forces. When the Army deployed combat forces to Kosovo as part of the North Atlantic Treaty Organization

³⁵ Jeffery A. Charlston, *Department of the Army Historical Summary FY 1999* (Washington, DC: United States Army Center of Military History, 2006), 45–47.

³⁶Ibid., 48–53.

(NATO) peacekeeping mission in 1999, it did not deploy a full division. The 1st Infantry Division's (ID) tactical command post did command and control the operation, but only one subordinate brigade was deployed beneath it. To increase the brigade's capabilities to meet the mission's requirements, extensive task organization changes were required. Thus, the 2nd Brigade, 1st ID deployed with two of its three maneuver battalions and was provided a field artillery battalion, a forward support battalion, and an engineer battalion.³⁷ While the extensive task organization changes did not equate to mission failure, it may have increased friction and diminished efficiency. As General Schoomaker would testify five years after the initiation of the Kosovo operation, "the tailoring and task-organizing our current force structure for such operations renders an ad hoc deployed force and a non-deployed residue of partially disassembled units, diminishing the effectiveness of both."³⁸

B. SHINSEKI'S VISION

On October 12, 1999, General Shinseki announced that the U.S. Army would "start changing now to develop a force that is strategically responsive and dominant across the spectrum of operations." On March 1, 2000, Shinseki testified before the Senate's Armed Services Committee and provided his rationale for transformation. Shinseki's vision was striking considering the then unknown future would include the terrorist attacks of September 11, 2001, and the invasion of Iraq in 2003, as he stated:

The Army must simultaneously effect a comprehensive transformation to better meet current and future strategic requirements. With the emergence of an increasingly complex international security environment, sources of conflict and tension are increasing. Sources of unrest and conflict range from competition between states to the instability caused by the collapse

³⁷ R. Cody Phillips, *Operation Joint Guardian: The U.S. Army in Kosovo* (Washington, DC: United States Army Center of Military History, 2007), 18.

³⁸ Johnson and others, A Review of the Army's Modular Force Structure, 11.

³⁹ Gerry J. Gilmore, "Army to Develop Future Force Now, Says Shinseki." *Army News Service*, October 13. 1999.

of states unable to meet the strains of resource scarcity, population growth, and ethnic and religious militarism. ⁴⁰

Shinseki's approach to transformation was three-pronged, and included the legacy, interim, and objective forces. This campaign called for the sustainment of legacy force units equipped with existing systems, and the creation of interim force units equipped with "a yet-to-be-selected, off-the-shelf system." The interim force was seen as a bridge between the legacy force and the objective force. The objective force Shinseki envisioned would be equipped with future combat systems and totally modernize the Army. While the objective force would take years to achieve, Shinseki set his sights on creating the interim force quickly.

In order to transform the first units designated to become interim brigade combat teams, Shinseki and the Army required funding, to provide the resources called for in the transformation plan. A number of factors assisted Shinseki in jump-starting his vision. A thirteen-year trend of declining buying power for the Army was reversed in FY 1999. In early 2000, the Army restructured a number of competing programs, and pulled money from under-performing programs, which allowed for \$537 million to be set aside for procurement of the interim armored vehicle (later re-designated Stryker). Shinseki also requested additional funding from Congress in 2000, and received an additional \$3.2 billion for Army transformation programs to include the creation of the interim force. Because Shinseki reallocated funding within the Army's budget, and because Congress was largely receptive to his aggressive vision for transformation, the first two SBCTs were training and organizing by December 2000.

⁴⁰ Fiscal Year 2001 Budget and Posture of the United States Army: Hearing Before the Committee on Armed Services, United States Senate, 106th Cong. 4 (2000) (statement of General Eric K. Shinseki, U.S. Army Chief of Staff).

⁴¹ Ibid.

⁴² Sydney Freedberg, "The New Model Army," *National Journal*, June 3, 2000, 1756.

⁴³ Neil Baumgardner, "Army Pushing for More Brigade Funding," *Defense Daily*, March 14, 2000; "Army Transformation Begins Its Second Year," *Army*, December 1, 2000; Freedberg, "The New Model Army," 1750–1756.; *Fiscal Year 2001 Budget and Posture of the United States Army: Hearing Before the Committee on Armed Services, United States Senate*, 106th Cong. 12–14 (2000) (statement of General Eric K. Shinseki, U.S. Army Chief of Staff).

The units selected to become the first two SBCTs began training and reorganizing prior to the selection of the vehicle that the unit would be based upon. Shinseki made it clear in his vision for transformation that the unit would be lethal, mobile, and deployable. Among his goals was to create a brigade-sized unit that could be deployed worldwide within ninety-six hours. Shinseki preferred to form the brigade around a wheeled vehicle that was lighter than most tracked vehicles and more survivable than the wheeled vehicles already in the Army's inventory. Based largely on Shinseki's preference for a wheeled vehicle platform, the Army selected General Dynamics Light Armored Vehicle-III from thirty-five similar vehicles to become the interim armored vehicle (Stryker). The Stryker family of vehicles fit well within Shinseki's vision for the future. As a bridge between the legacy and objective force, the Stryker provided a common platform from which its ten variants (infantry carrier, mortar carrier, medical evacuation, reconnaissance, engineer, anti-tank, fire-support, mobile gun system, nuclear, biological, and chemical (NBC) reconnaissance, and commander's vehicle), were based. The commonality found within each variant reduced logistical constraints as they used the same parts and required fewer military occupational specialties to maintain the vehicles.44

Selecting a wheeled vehicle to equip the interim brigades was an important and controversial decision, but equally significant was the change in how the brigades were organized. The SBCT concept was significant because it added combat power to the formation. At its core, the SBCT was organized around three infantry battalions. The SBCT was further strengthened with the addition of a reconnaissance, surveillance and target acquisition (RSTA) squadron and a field artillery battalion. In addition, the SBCT was outfitted with its own engineer company, signal company, anti-tank company, and military intelligence company. The SBCT was designed to be supported logistically from an internal brigade support battalion, which included transportation, medical, and maintenance companies. As a result, the SBCT could project three maneuver battalions,

⁴⁴ Harold Kennedy, "Army's New Combat Vehicle to Undergo Additional Tests," *National Defense*, December 2000, 35; U.S. General Accounting Office, *Military Transformation: Army's Evaluation of Stryker and M–113A3 Infantry Carrier Vehicles Provided Sufficient Data for Statutorily Mandated Comparison* (Washington, DC: Government Printing Office, 2003), 2–4.; Gilmore, "Army to develop future now."

conduct its own reconnaissance with the RSTA squadron, and support itself with indirect fires from its organic field artillery battalion. This type of combined arms brigade sized unit was unique and only the Army's two armored cavalry regiments had a similar capability when the SBCT concept was developed. With the Stryker vehicle selected, and the unit organization drafted, the Army's first SBCT began to test and field the equipment in 2002 that it would take to war in 2003.

In April 2002, the first Stryker vehicles began rolling off the assembly lines and into the hands of the soldiers that would be using them. By August 2002, parts of the 3rd Brigade, 2nd ID (3/2 SBCT), based at Fort Lewis, WA had fielded the vehicles, and to demonstrate their deployability, a company sized element was transported via Air Force C-130 aircraft to Fort Irwin, CA. The brigade also conducted comparison testing between the Stryker and the M-113A3 tracked armored personnel carrier as required by FY 2001 National Defense Authorization Act. This testing was the result of concerns regarding the cost, maneuverability and survivability of the Stryker. These concerns were raised largely by Senator Rick Santorum, whose home state of Pennsylvania produced the M113.⁴⁶

Congressional mandated testing was important to Army transformation for a number of reasons. Until testing was complete, the Army's budget to buy the Stryker for the first two selected units was reduced by 20 percent. This had no impact on 3/2 SBCT's transformation timeline, but increased the timeline to field the second brigade scheduled to receive the Stryker. The Army was also unable to purchase Strykers for the additional four brigades scheduled to be converted to SBCTs. While these units were not expected to complete transformation until 2006, they would fall further behind because of the time required to manufacture the vehicles after they were purchased. Further, successful testing of the Stryker would silence the critics that opposed the use of a wheeled vehicle when a suitable tracked vehicle was already in the Army's inventory. The United States General Accounting Office (GAO) official report regarding vehicle testing concluded that

⁴⁵ Department of the Army, *Field Manual 3–20.21: The Stryker Brigade Combat Team Infantry Battalion* (Washington, DC: GPO, 2003), 1–1 – 1–22.

⁴⁶ Dennis Steele, "Realizing the Army Vision," *Army*, December 2002, 48; Kennedy, "Army's New Combat Vehicle to Undergo Additional Tests," 35.

⁴⁷ Kennedy, "Army's New Combat Vehicle to Undergo Additional Tests," 36.

the testing "provided sufficient data to determine the two vehicles' relative effectiveness," and "concluded that the Stryker provided more advantages in force protection, support for dismounted assault, and close fight and mobility and was more survivable against ballistic and nonballistic threats."

3/2 SBCT completed its fielding of the Stryker family of vehicles in January 2003 after selected units within the brigade completed comparison testing. After General Shinseki's retirement in June 2003, 3/2 SBCT deployed to Mosul, Iraq to execute counter-insurgency operations in October. The second brigade selected for transformation, the 1st Brigade, 25th ID (1/25 SBCT) completed its transformation in January 2004, and replaced 3/2 SBCT in Iraq in October 2004. While both SBCTs that deployed in the first few years of the Iraq war proved to be extremely capable, the Stryker vehicle and SBCT concept were not immune to scrutiny.⁴⁹

1. Stryker Development: Concerns and Results

Concerns regarding the Stryker and the SBCT concept were prevalent in the first few years of transformation. Critics of the decision to select a wheeled vehicle platform over a tracked platform were very vocal and tried to discredit the concept. The Air Force also raised valid concerns regarding the feasibility to meet deployment timelines associated with the SBCT concept. Higher-than-expected procurement costs and construction projects increased the projected budget for transformation. Additionally, production delays for the mobile gun system, and the NBC reconnaissance variant precluded their inclusion into SBCT formations until 2006. While many of these concerns were valid, they become less prevalent as SBCTs demonstrated their agility and ability in Iraq and Afghanistan.

Victor O'Reilly was one of the most vocal critics of the Stryker following its selection as the interim armored vehicle. O'Reilly drafted a 108-page critique of the vehicle and concept on behalf of Congressman Jim Saxton, a former Republican

⁴⁸ U.S. General Accounting Office, Army's Evaluation Provided Sufficient Data, i.

⁴⁹ U.S. Government Accountability Office, *Military Transformation: Fielding of Army's Stryker Vehicles Is Well Under Way, but Expectations for Their Transportability by C–130 Aircraft Need to Be Clarified* (Washington, DC: GPO, 2004), 15.

representative from New Jersey. At its core, O'Reilly's criticism was focused on the selection of the Stryker over the M-113A3 and other legacy force equipment to include the M1 tank and M2 infantry fighting vehicle. He discredited the Stryker's mobility, fire-power and crew-protection based upon the rocket-propelled grenade threat encountered in Iraq during the first few months of occupation. He also questioned the credibility regarding the testing that the GAO found satisfactory. Further, he questioned Shinseki's character and accused him of corruption and being dishonest. The critique was damning of the Stryker and SBCT concept, but mostly without merit. Its largest failing was that it championed the M113 over the more versatile and technologically superior Stryker. The bombastic language of the report was a thin veneer for its real reason: to discredit the Stryker to promote the spending required to modify the ageing M113 fleet that could not compete on the modern battlefield. ⁵⁰

While O'Reilly's critique was largely unproven, the RAND Corporation and the GAO raised valid concerns over the ability to meet the deployment timelines set forth by Shinseki. RAND found "that a force with more than 1,000 vehicles cannot be deployed by air from (continental United States) CONUS to the far reaches of the globe in four days," but "it is possible to achieve deployment timelines on the order of one to two weeks." The GAO report raised further questions regarding the Stryker's ability to be transported via C-130 aircraft. The GAO found that the Stryker's weight made it too heavy for C-130 transport for anything further than 1,000 miles under the most ideal conditions. Considering that C-130 transportability was a key factor to the Stryker's selection as the interim armored vehicle, this was a significant failure of the transformation process. The RAND Corporation's study understood the limitations of

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⁵⁰ Victor O'Reilly, "Stryker Brigade Versus The Reality of War," *Defense and the National Interest*, 2003, 16–20, 66–67, 80–85. http://www.dnipogo.org/fcs/pdf/stryker_reality_of_war.pdf

⁵¹ Alan Vick, David Orletsky, Bruce Pirnie, and Seth Jones, *The Stryker Brigade Combat Team : Rethinking Strategic Responsiveness and Assessing Deployment Options*, (Santa Monica, CA: RAND, 2002), xiv.

C-130 aircraft and did not factor them into their calculations. Regardless, the SBCT concept failed in practice to meet Shinseki's goal of deploying a lethal, brigade-sized unit within 96 hours.⁵²

Other concerns regarding the SBCT and transformation centered on the failures to meet projected costs, and production timelines. Shinseki's plan for a total of six SBCTs was estimated to cost \$7.1 billion. Stryker production costs exceeded projections by \$390 million, while military construction costs required for the SBCTs supporting infrastructure exceeded projections by \$1.01 billion. In total, the costs associated with the transformation of the first six brigades exceeded estimates by \$1.6 billion. Further, the first four SBCT deployments were unable to utilize two Stryker variants due to production issues. The mobile gun system and NBC reconnaissance variants were both delayed due to the time required to develop and test the new technology found in each vehicle type. Both variants did not go into full production until 2006-2007. Subsequent deploying SBCTs did have both variants available, starting with the 4th Brigade, 2nd ID which deployed to Iraq in April, 2007. 53

Criticism of the Stryker and SBCT concept largely subsided as additional brigades were transformed to SBCTs and the Army set a course toward modularity. While some of it was baseless and founded on the preference for tracked vehicles, valid concerns regarding the ability to strategically deploy an SBCT within ninety-six hours still remain. Even if the RAND Corporation's calculations were correct, deploying an SBCT via air within one to two weeks is still much quicker than the time required to transport a heavy brigade combat team via ship. Where the creation of the SBCT can be seen as an attempt to increase the power projection of the U.S. Army, the decision to transform combat brigades to the modular BCTs can be seen as the Army's attempt to increase the agility of the force by creating like units that could be interchanged within an area of operations as required.

⁵² Ibid., 18–19.; U.S. Government Accountability Office, Fielding of Army's Stryker Vehicles Is Well Under Way, 22–24.

⁵³ U.S. Government Accountability Office, Fielding of Army's Stryker Vehicles Is Well Under Way, 11–12, 18–19.

C. TRANSFORMATION TO MODULARITY

While the decisions that were made in 1999 to start Army transformation through the creation of the SBCT affected a small portion of the Army's combat power, Shinseki's successor, General Peter Schoomaker, expanded transformation through a vision of modularity. Schoomaker's vision abolished the notion of the legacy, interim and objective force. As such, Shinseki's legacy and interim forces became Schoomaker's current force and the objective force became the future force. The change in terminology signaled a shift away from three distinct force types to the current force's modular structure and the future force's potential structure based upon the future combat systems (FCS).

The decision to transform to the modular force in 2003 introduced a number of significant changes to the structures, capabilities, and responsibilities of the Army's combat brigades, divisions, and corps. Conceptually, two types of higher headquarters were designed to replace the division, corps, and echelons above corps. Traditionally, corps and divisions were permanently assigned subordinate maneuver, combat support (CS) and combat service support (CSS) forces. Corps level CS and CSS units could be employed to provide capabilities not found within the division, and division level CS and CSS units could be employed to provide capabilities to the division's subordinate combat brigades. While these higher level headquarters would retain their historical designation, i.e., I Corps, they would operate under the unit of employment construct.

The Unit of Employment y (UEy) was to replace the numbered field armies and corps, while the Unit of Employment x (UEx) was to replace the division. With the advent of the unit of employment, corps and divisions essentially became modular headquarters that could control forces within an area of operations. Units of employment would therefore no longer maintain a number of permanently assigned units and maintain a rigid force structure. Instead subordinate modular forces could be assigned based upon the force requirements to meet the demands of the mission. Interestingly, the term unit of

⁵⁴ Army Transformation: Hearing Before the Committee on Armed Services, United States House of Representatives, 108th Cong. 22–23. (2004) (statement of General Peter J. Schoomaker, U.S. Army Chief of Staff).

employment was never codified in Army field manuals, although the *Army Comprehensive Guide to Modularity* and the *2004 Army Transformation Roadmap* did use the terms abundantly. By the time Army *Field Manual 3-0: Operations*, was revised in 2008, the term unit of employment was dropped from Army lexicon. Although the terms corps and division remained in doctrine, their defined roles mirrored those found within the unit of employment concept.⁵⁵

Where the Army's transformation to modularity decreased the permanently assigned capabilities at the corps and division, it increased the capabilities within the subordinate combat brigades. In a manner similar to the unit of employment concept, combat brigades were designated units of action (UA). UAs were to become much like the traditional armored cavalry regiments and would "gain improved force packaging, sustainability, battle command and situational awareness while retaining the same lethality as the larger, task-organized brigade combat teams." ⁵⁶ In addition to the units of action, transformation created a number of modular support brigades. These included the following: battlefield surveillance brigade, fires brigade, combat aviation brigade, sustainment brigade, maneuver enhancement brigade, and the functional brigade. ⁵⁷

Much like the term unit of employment, the term unit of action was also removed from Army lexicon. While the term UA was used interchangeably with the term brigade combat team from the outset in transformation publications, once modularization was codified in doctrine, only the term BCT remained. Because the transformed BCTs would emerge as the Army's primary conventional force building block, the rest of section aims to explain the structure of the different BCTs and compare them to their predecessors. In doing so, it becomes clear that the transformation to modularity not only created standardized organizations with greater capabilities but a lighter force as well.

⁵⁵ U.S. Army Training and Doctrine Command, *Army Guide to Modularity Version 1.0*, (Fort Monroe: GPO, 2004), 1–5 – 1–11; Department of the Army, *2004 Army Transformation Roadmap* (Washington, DC: GPO, 2004), 3–5 – 3–7; Department of the Army, *Field Manual 3–0: Operations* (Washington, DC: GPO, 2008), C–4 – C–5.

⁵⁶ Department of the Army, 2004 Army Transformation Roadmap, 3–2.

⁵⁷ Types of functional brigades: engineer, military police, chemical, biological, radiological, and nuclear (CBRN), air and missile defense, signal, explosive ordnance disposal, medical, and intelligence.

⁵⁸ Department of the Army, *Field Manual 3–0: Operations*, C–6.

General Schoomaker remarked in his testimony to Congress in July 2004 that no two like units from the division level to the company level were identical.⁵⁹ The development of the BCT sought to standardize the Army's tactical formations. In addition to the earlier developed SBCT, the Army would create the Heavy Brigade Combat Team (HBCT) and the Infantry Brigade Combat Team (IBCT). The HBCT was designed to replace the former armored and mechanized infantry combat brigades, while the IBCT sought to replace the former light infantry brigades. The result of the transformation to the modular BCT was three distinct types of combat units with distinct capabilities.

The creation of the HBCT not only standardized the organization in terms of subordinate armor and mechanized units, but also added additional capabilities not previously found in armored and mechanized infantry brigades. With "unmatched tactical mobility and firepower," HBCTs were designed to "execute operations with shock and speed." In terms of organization, the HBCT included two combined-arms battalions (CAB), one armed reconnaissance squadron (ARS), one field artillery battalion, one brigade special troops battalion (BSTB), and one brigade support battalion (BSB). Pushing the combined arms concept to lower levels, the CAB included two M1 series tank companies and two M2 series mechanized rifle companies. In addition, the CAB possessed an organic mortar platoon, scout platoon, and a sniper section. To best support the brigade and its maneuver forces, the BSB included maintenance, medical, transportation, and forward support companies, hill the BSTB included engineer, signal, and military intelligence companies. In total, the HBCT counted thirty subordinate company-sized units allowing the HBCT to conduct operations across the spectrum of conflict through its own firepower and support capabilities. 62

⁵⁹ Army Transformation: Hearing Before the Committee on Armed Services, United States House of Representatives, 108th Cong. 19–20. (2004) (statement of General Peter J. Schoomaker, U.S. Army Chief of Staff).General Schoomaker's statement was not entirely true as the two operational SBCTs were identical.

⁶⁰ Department of the Army, *Field Manual 3-90.6: Brigade Combat Team* (Washington, DC: GPO, 2010), 1–7.

⁶¹ Forward support companies are detached from the BSB and attached to the CABs, field artillery battalion, and RSTA squadron.

⁶² Department of the Army, Field Manual 3-90.6: Brigade Combat Team, 1–7 – 1–9.

Much like the HBCT, the creation of the IBCT standardized infantry organizations while providing additional capabilities. Although three types of infantry brigades (infantry, air assault, and airborne) remained in the force structure, they were designed to be identical regardless of their method of transportation or employment. "Organized around dismounted infantry," IBCT's were "optimized for operations in close terrain, such as swamps, woods, hilly and mountainous areas, and densely populated areas." The IBCT was organized in a similar fashion to the HBCT. The IBCT counted two infantry battalions, one field artillery battalion, one reconnaissance squadron, one brigade special troops battalion, and one brigade support battalion. An infantry battalion included three rifle companies, a weapons company equipped with wheeled vehicles and anti-tank capabilities, and a mortar platoon, scout platoon, and sniper section. The IBCT's BSB and BSTB included the same company sized elements found within the HBCT. All told, the IBCT included thirty subordinate company-sized units designed to be easily deployed and "optimized for offensive operations against conventional and unconventional forces in rugged terrain."

Official Army transformation publications and outside analysts concur that the drive toward modularity was based upon the decision to move away from the division-centric force structure toward self-contained BCTs. The RAND Corporation's *A Review of the Army's Modular Force Structure*, notes that in addition to modularity, "the service also embarked on the effort to grow the Army and to rebalance the force." Army growth and transformation to modularity resulted in the increase from the thirty-three pre-modular active combat brigades in 2001 to forty-five modular BCTs in 2010. 66 Of the forty-five active BCTs, there were: sixteen HBCTs, twenty-one IBCTs, and eight SBCTs. Where the pre-modular Army was predominantly heavy, the modular Army became more balanced with the reduction of armor battalions, the increase in infantry battalions, and

⁶³ Ibid., 1–10.

⁶⁴ Ibid., 1–12.

⁶⁵ Johnson and others, A Review of the Army's Modular Force Structure, 16.

⁶⁶ Kugler, "Case Study in Army Transformation: Creating Modular Forces," 16.

the increased number of SBCTs.⁶⁷ There were criticisms regarding the organization of the BCT, specifically in regards to the decreased number of maneuver battalions the BCT.⁶⁸ However, the RAND Corporation noted in 2012 that "the BCTs are generally better armed and staffed that the units they superseded," and "the current force structure features superior versatility to the division-centric structure."

D. CONCLUSION

General Eric Shinseki stated that, "Army transformation represents the strategic transition we will have to undergo to shed our Cold War designs, to prepare ourselves now for the crises and wars of the 21st century. It is also a test of our institutional agility and our heart as an Army." The Stryker brigade concept was only one of a number of initiatives to meet Shinseki's vision of transformation. Shinseki's transformation restructured unit organization above the battalion level, re-focused manning priorities Army-wide, and re-worked much of the Army's outdated doctrine. While these initiatives were necessary for a successful transformation as a whole, the creation and fielding of the SBCT provided a capability that was lacking in a changing world. The SBCT provided a lethal, survivable, deployable, combined-arms brigade that was built around a new vehicle. Amazingly, the SBCT went from concept to reality within four years, due in large part to Shinseki's vision and leadership. In the face of criticism, Shinseki drove the Army toward transformation harder and faster than anyone since World War II.

When General Peter Schoomaker assumed his position as the Army Chief of Staff, the Army was well on its way in its efforts to transform selected units to SBCTs. Leveraging the inertia gained from Shinseki's leadership toward transformation, Schoomaker exported the limited effort to the wider Army. Force structure from the corps to the battalion was changed to make the brigade combat team the center-piece of the Army's fighting force. As the Army transformed to a modular force, the service grew in

⁶⁷ Johnson and others, A Review of the Army's Modular Force Structure, 17.

⁶⁸ The pre–modular combat brigade was usually composed of three maneuver battalions, while the modular BCT was composed of only two maneuver battalions.

⁶⁹ Johnson and others, A Review of the Army's Modular Force Structure, 35.

^{70 &}quot;Army Transformation Begins Its Second Year." *Army*.

size as well. While fighting in Afghanistan and Iraq, the Army increased the number of BCTs by twelve and adjusted the force structure away from the reliance on heavy forces toward the greater balance between heavy, light, and medium weight forces. Although it would take the Army nearly six years to complete the transformation toward modularity, the force that emerged was better suited to meet the challenges the Army faced across the full spectrum of conflict.⁷¹

⁷¹ Johnson and others, A Review of the Army's Modular Force Structure, 10–11, 39.

III. CASE STUDY: ARMY TRANSFORMATION AND THE STRYKER BRIGADE COMBAT TEAM

General Shinseki's 1999 decision to set the Army down a path toward transformation sought to be "the most significant effort to change the Army in 100 years," and the aim was "not a single platform swapout, but a systemic change and full integration of multidimensional capabilities." While not all of the lofty goals set forth, such as the creation of the objective force, were met during Shinseki's term as Army Chief of Staff, nor by his successors, the Army did successfully develop, field, train, and deploy Stryker Brigade Combat Teams. This chapter seeks to determine why the decision to transform the Army in 1999 was made, specifically the decision to create the SBCT. The literature regarding military innovation offers a number of theories that seek to answer the question of why military organizations change. Based upon the theories identified in the first chapter, this chapter seeks to examine three hypotheses that may best explain why the Army sought transformation and decided to generate SBCTs.

The first hypothesis suggests that the decision to begin transformation was a logical response to a changed or changing security environment and to the Army's expected roles and missions for the future. This hypothesis is constant with Barry Posen, Deborah Avant, and Stephen Peter Rosen, who all assert that changes in the external security environment have influence in decisions related to military change and innovation.⁷³ The second hypothesis contends that the Army's decision was the result of civilian leadership that forced the service to change.⁷⁴ This hypothesis is based upon Posen's organization theory and balance of power theory, which both emphasize the importance of civilian intervention in military innovation.⁷⁵ The final hypothesis argues

⁷² The Army Transformation: Hearing Before the Airland Subcommittee, Committee on Armed Services, United States Senate, 106th Cong. 9 (1999) (statement of General Eric K. Shinseki, U.S. Army Chief of Staff).

⁷³ Posen, *The Sources of Military Doctrine*, 74–75; Avant, *Political Institutions and Military Change*, 2; Rosen, *Winning the Next War*, 75–76.

⁷⁴ Civilian leadership for the purposes of this hypothesis are those that extort control or influence from outside the Army such as the president, the Secretary of Defense, or assistant secretaries.

⁷⁵ Posen, The Sources of Military Doctrine, 75, 224.

that the Army's decision to change was largely the result of innovative thinking from the Army's top uniformed and civilian leaders and their staffs. This hypothesis is constant with the literature that notes that change does not need an external influence, but can originate from within an organization.⁷⁶

To investigate the three hypotheses, this Chapter is mainly concerned with the immediate time period before and after the decision to transform the Army in 1999. However, as the decision to transform may be traced to events, conceptual developments, and analysis that occurred earlier, some sources date from the early to mid-1990s. This Chapter uses a variety of primary and secondary sources to arrive at its conclusion. Chief among these sources are the National Defense Panel's *Transforming Defense: National Security in the 21st Century*, official DoD publications such as the *Report of the Quadrennial Defense Review* published in May 1997 (1997 QDR), and *Joint Vision 2010*, as well as statements and interviews from Shinseki, Major General James Dubik and others. In doing so, this chapter finds that there is evidence that elements of each hypothesis were present in the Army's decision, but that the cause is likely rooted in the senior Army leadership who were influenced by a changed security environment.

A. THE SECURITY ENVIRONMENT AND TRANSFORMATION

To prove or disprove the first hypothesis, which argues that the Army's decision to transform was a logical response to a changed or changing security environment and to changing roles and missions, it is important to understand what was known or perceived about the world and the Army at the time. In 1999, the United States and its Army were experiencing a period of relative peace less than a decade removed from the end of the Cold War. Despite this relatively peaceful period, the Army still maintained some 122,000 personnel forwarded deployed across the world to include forces in support of operations in Bosnia and Kosovo.⁷⁷ While the Army's posture in 1999 was in part a reflection of the Cold War past as indicated by the presence of large numbers of soldiers

⁷⁶ Rosen, Winning the Next War, 21

⁷⁷ Status of Forces: Hearing Before the Committee on Armed Services, United States Senate, 106th Cong. 3–4 (1999) (statement of General Eric K. Shinseki, U.S. Army Chief of Staff).

in Europe and Asia, it also was a glimpse into what the future may hold which was signified by the then on-going operations in the Balkans.

The Cold War's end in 1991 signified a major change in the United State's role in the global security environment. Prior to the end of the Cold War, the U.S. Army's security posture was largely predicated on the threats associated with the Soviet Union and a need to conduct a large-scale, high-intensity conflict.⁷⁸ With the Soviet Union's demise, America's long-standing threat was eliminated, creating a sense of uncertainty in the security environment. In the time period between the end of the Cold War and Shinseki's transformation announcement, those concerned with the security environment took action to describe and predict what was to come in the future. If the Cold War world based on American and Soviet competition was dangerous, but stable and predictable, the post Cold War world was deemed challenging and unpredictable. Pertinent DoD documents such as Joint Vision 2010, the QDR from 1997, and the DoD sponsored National Defense Panel's Transforming Defense: National Security in the 21st Century, all highlighted the unpredictable nature of the then current and future security environments.⁷⁹ Such unpredictability was rooted not only within the wide-array of potential types of threat, but also in the potential locations where the United States could expect to conduct full spectrum operations.⁸⁰

The perceived challenges associated with unpredictable locations of future conflict areas coupled with a wide array of potential military operations contrasted greatly with the Army's Cold War focus that was predicated on geographically based threats."81 Thus, the geo-strategic security environment in the mid to late-1990s would

⁷⁸ Bruce R. Nardulli and Thomas L. McNaughter, "The Army Toward the Objective Force," in *Transforming America's Military*, ed. Hans Binnendijk (Washington, DC: National Defense University Press, 2002), 103.

⁷⁹ National Defense Panel, *Transforming Defense* (December 1997), 1; Department of Defense, *Report of the Quadrennial Defense Review*, (May 1997), under "Section II: The Global Security Environment." http://www.dod.gov/pubs/qdr/toc.html; Chairman of the Joint Chiefs of Staff (CJCS), *Joint Vision 2010* (July 1996), 8.

⁸⁰ While the Department of the Army in *FM 3–0:Operations*, 1–14, stated that, "Full spectrum operations include offensive, defensive, stability, and support operations," documents such as the CJCS, *Joint Vision 2010*, 4, expanded the meaning of full spectrum operations to include "deterrent, conflict prevention, and peacetime activities."

⁸¹ Nardulli and McNaughter, "The Army Toward the Objective Force," 104.

not permit the Army's reliance on forward-stationed units and pre-positioned equipment to meet the demands in far-flung locations around the globe. Further, predictions about the future security environment placed a premium on the United State's ability to project power into areas where there was no American presence or military footprint.⁸² However, until Shinseki's announcement in 1999, the Army had made little effort to change its force structure or posture to meet the challenges that it had encountered in its recent history, and those that many experts predicted for the future.⁸³

In addition to the wide array of potential threats and geographical locations that the post-Cold-War American military would need to consider, the United States was also aware of the impact of technology in the global security environment. At the forefront of technological change were the advances in information technologies. In the mid to late 1990s, Information-related technologies and other emerging technologies were believed to be creating a revolution in military affairs (RMA).⁸⁴ The RMA implied "a growing potential to detect, identify, and track far greater numbers of targets over a larger area for a longer time than ever before."⁸⁵ As such, the potential impact of the RMA and the harnessing of RMA related technologies was a binding force in the prominent literature regarding the future of the American military.⁸⁶

As documents such as the QDR from 1997, *Transforming Defense: National Security in the 21st Century*, and *Joint Vision 2010* all originated from the Department of Defense, it is clear that the DoD and the Army were aware of the changes in the security

⁸² National Defense Panel, *Transforming Defense*, ii; Nardulli and McNaughter, "The Army Toward the Objective Force," 104; Department of Defense, *Report of the Quadrennial Defense Review*, (May 1997), under "Section III: Defense Strategy." http://www.dod.gov/pubs/qdr/toc.html.

⁸³ Both the 1991 Gulf War and the Task Force Hawk deployment to Kosovo in 1999 highlighted the challenges associated with Army efforts to project power quickly.

⁸⁴ Thomas K. Adams, *The Army After Next: The First Postindustrial Army* (Westport: Praeger, 2006), 1.

⁸⁵ National Defense Panel, Transforming Defense, iii.

⁸⁶ Ibid., iii, 5, 43; Department of Defense, *Report of the Quadrennial Defense Review*, (May 1997), under "Section VII: Transforming U.S. Forces for the Future." http://www.dod.gov/pubs/qdr/toc.html; CJCS, *Joint Vision 2010*, 11–15.

environment and the potential impact of technological developments.⁸⁷ Further, it also appears that the United States was also aware that the military service component's roles and missions had changed and that additional change was possible in the future. While the changed or evolving roles and missions that the Army could expect to undertake in the future may have been largely based on a changing security environment, American strategic vision and leadership in the form of military doctrine was also a contributing factor.⁸⁸ Although the source of changed or changing roles and missions is important in military innovation in general, when looking into the Army's decision in 1999, the main goal is to identify the change itself and any rationale that could have driven transformation.

As noted earlier, the Army that existed during the Cold-War was heavily focused on high-intensity conflict with the Soviet Union. However, the United States was involved in military operations and wars during the Cold War, such as the Vietnam War and interventions in Panama and Grenada that were outside the realm of high-intensity conflict with the Soviets. ⁸⁹ During the break-up of the Soviet Union and after the end of the Cold-War, the Army continued to find itself involved in conflict of some sort. These operations ranged from war with Iraq during the 1991 Gulf War to intervention missions in Somalia, Kosovo, and Bosnia. ⁹⁰ Although the Army may have been "geared to fight big wars," there were numerous instances, both during and after the Cold War, that indicate that the Army's role within the DoD was to conduct missions within smaller wars and operations other than war (OOTW). ⁹¹

⁸⁷ This assumes that as a component of the DoD, the Army and Army leaders were aware and acted in accordance with the themes and directions put forth in the QDR 1997 and *Joint Vision 2010*.

⁸⁸ David Jablonsky, "Army Transformation: A Tale of Two Doctrines," *Parameters*, (Autumn 2001). http://www.carlisle.army.mil/usawc/parameters/articles/01autumn/jablonsk.htmarticle.

⁸⁹ While the Vietnam War was a not low-intensity conflict, it was likely not as intense as direct conflict with the Soviet Union in Europe may have been.

⁹⁰ Public Broadcasting Service, *The Future of War*, "Interview: General Eric K. Shinseki," http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/shinseki.html, also highlighted deployments to Haiti and East Timor as smaller scale, lower intensity operations that the Army had undertaken from 1989 to 1999.

⁹¹ Nardulli and McNaughter, "The Army Toward the Objective Force,"105.

The pre-transformational Army may have been largely invested to fight big wars, but its recent experiences trended toward smaller conflicts. This contradiction was likely rooted in the DoD's strategy that was predicated on simultaneously fighting two wars in two distinct major theaters of operations. 92 The two-theater of war strategy was reaffirmed in 1997 and was likely seen as a prudent precaution against any number of regional powers that had "both the desire and means to challenge U.S. interests militarily." 93 At the same time, the DoD recognized the increase in lesser conflicts and interventions and the potential risks posed by terrorism. As such, the *Report of the Quadrennial Defense Review* called for a full-spectrum force that could execute a wide array of military operations. 94

When the Army set down a course toward transformation in 1999, there were elements of continuity as well as a sense of change within the service's roles and missions. First and foremost, the Army's overarching role, "to fight and win our nation's wars," had not changed. As part of *Joint Vision 2010's* full-spectrum dominance construct within a high-intensity conflict, the Army expected to and was likely required to provide the bulk of the land component for a ground combat campaign. Further, the Army expected that it would continue to conduct peacekeeping operations and interventions in failing states. Thus, the Army's potential roles and missions were believed to span the full-spectrum of military operations from high-intensity conflict with a regional power to peacekeeping operations in a less-developed state.

While the Army had conducted all of the types of missions listed above in the past, the evidence suggests that when the decision to transform was made, there was an expectation that operations on the lower scale of intensity would continue to grow in

⁹² Department of Defense, *Report of the Quadrennial Defense Review*, (May 1997), under "The Secretary's Message." http://www.dod.gov/pubs/qdr/toc.html.

⁹³ Ibid., under "Section II: The Global Security Environment."

⁹⁴ Ibid., under "Section II: The Global Security Environment," and "Section III: Defense Strategy."

⁹⁵ Status of Forces: Hearing Before the Committee on Armed Services, United States Senate, 106th Cong. 3 (1999) (statement of General Eric K. Shinseki, U.S. Army Chief of Staff).

⁹⁶ Ibid., 3–4; CJCS, *Joint Vision 2010*, 2.

⁹⁷ Public Broadcasting Service, *The Future of War*, "Interview: General Eric K. Shinseki."

scope and number. 98 Coupled with a wide array of potential missions, was the belief that the Army's force structure was unsuitable to meet future demands. The pretransformational Army's mix of heavy and light divisions was unbalanced in regards to capabilities and operational responsiveness. While the Army's heavy forces were deemed very capable, they were slow to deploy and required an immense logistical support network. The light forces on the other-hand were more agile and could deploy more quickly, but were found lacking in survivability and lethality. 99

The decision to create the SBCT may have been conceived as a way to bridge the gap between the Army's heavy and light forces as well as between the legacy and objective forces envisioned within the greater transformation initiative. ¹⁰⁰ As a bridge between the heavy and light forces, the SBCT provided increased lethality and intertheater mobility over the light forces, and provided increased deployability and agility over the heavy forces. The SBCT could also span the gap between the legacy and objective forces by validating existing technologies and developing doctrine and training that could be further harnessed by the objective force of the future. ¹⁰¹ However, creating a stop-gap that could fill an operational shortfall was likely done to provide a needed capability that was necessary due to a changed and evolving global security environment and the roles and missions that the Army could be expected to execute.

There is evidence that changes in the security environment impacted the Army's decision to begin transformation. As the leader of the Army's transformation effort to create the SBCT at Fort Lewis, Washington, Major General Dubik credited the changed security environment, especially the end of the Cold-War as a driver of innovation. Shinseki echoed this sentiment, but added that smaller scale operations were increasingly

⁹⁸ General Shinseki makes clear that a transformed Army must meet the challenges of full–spectrum operations and on October 26, 1999 he specifically alluded to the number of small–scale contingency operations in *Status of Forces: Hearing Before the Committee on Armed Services, United States Senate*, 106th Cong. 3–5 (1999) (statement of General Eric K. Shinseki, U.S. Army Chief of Staff).

⁹⁹ Fiscal Year 2001 Budget and Posture of the United States Army: Hearing Before the Committee on Armed Services, United States Senate, 106th Cong. 11 (2000) (statement of General Eric K. Shinseki, U.S. Army Chief of Staff).

¹⁰⁰ Public Broadcasting Service, *The Future of War*, "Interview: General Eric K. Shinseki."

¹⁰¹ Ibid.; Public Broadcasting Service, *The Future of War*, "Interview: Major General James Dubik," http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/dubik.html

likely which highlighted the capability gap between light and heavy forces. Further, both Shinseki and Dubik indicated in interviews with the Public Broadcasting Service that America's enemies had likely learned that the Army's greatest vulnerability was tied to a reliance on developed air and sea ports needed to deploy heavy forces. ¹⁰² Creating and fielding a medium-weight brigade-sized combat unit that could deploy to underdeveloped airfields was a suitable solution that provided a needed capability.

There is further evidence that future Army roles and missions played a part in the decision to transform. General Shinseki's testimony before the Senate's Armed Forces Committee in early March 2000 noted that the Army's mission requirements had increased, and that the pre-transformational force was not optimal to meet the challenges of full spectrum operations. In addition, Shinseki highlighted a need for the Army to increase its strategic responsiveness across a wide array of potential missions. ¹⁰³ The decision to develop the SBCT can be seen as a solution to the problems that a full spectrum force could encounter. The SBCT had inherent lethality in its infantry-centric formations that could operate in wide latitude of operational environments to include urban terrain, but was also well suited to conduct operations on the lower scale of intensity to include peacekeeping operations.

A changed or changing security environment and changed or changing roles and missions are plausible drivers that spurred the Army's decision to begin transformation in 1999. Documents originating from the DoD highlight the changes that the security environment had undergone after the end of the Cold War. Although the Army had not undertaken any major innovative changes until the decision in 1999 was announced, statements from the two senior officers spearheading transformation clearly point to an evolving security situation as a factor prompting change. Lastly, although the Army was geared toward large scale, high-intensity conflict, its recent history had demonstrated that

¹⁰² Ibid., Public Broadcasting Service, *The Future of War*, "Interview: General Eric K. Shinseki."

¹⁰³Fiscal Year 2001 Budget and Posture of the United States Army: Hearing Before the Committee on Armed Services, United States Senate, 106th Cong. 11–12 (2000) (statement of General Eric K. Shinseki, U.S. Army Chief of Staff). Shinseki also mentioned strategic responsiveness in testimony to Congress on October 16, 1999, and March 8, 2000 and during a press conference at the Association of the United States Army annual conference in 1999.

smaller scale conflicts and interventions were more likely in the future. As such, both Shinseki and Dubik noted that a more deployable and responsive force was required that could meet the Army's need to conduct full-spectrum operations.

B. CIVILIAN INTERVENTION AND TRANSFORMATION

The second hypothesis put forth argues that the decision to begin Army transformation was the result of civilian leadership that forced the service to change. In this case, civilian leaders such as the President of the United States, his appointed Secretary of Defense (SECDEF), or the Secretary of the Army would have to play instrumental roles in the Army's decision to create the SBCT. While most civilian intervention is synonymous with direct or formal orders given to a service component, there is potential that indirect pressure may be applied to spur change. ¹⁰⁴ This section aims to identify evidence of direct or indirect civilian influence on the Army's decision to transform. Whether or not civilian leadership was a causal factor, it is likely that Army transformation could not have occurred without some level of civilian support.

When looking for evidence that transformation was the result of civilian intervention, the *Report of the Quadrennial Defense Review* from May 1997 offers a glimpse into the DoD's future plans and resourcing priorities only a few short years before the Army began transformation. Although the 1997 QDR was the first of its kind, it was following up on the 1991 Base Force Study and the 1993 Bottom-Up Review to look within the DoD to determine future strategy and force requirements. Complete with an introduction from Secretary of Defense William S. Cohen, the 1997 QDR was collaborative effort between the Office of the Secretary of Defense and the Joint Staff. As

¹⁰⁴ Posen, The Sources of Military Doctrine, 47.

¹⁰⁵ Association of the United States Army Institute of Land Warfare, "Quadrennial Defense Review: From 1997 to 2001," *Defense Report*, June 2000, http://www.ausa.org/SiteCollectionDocuments/ILW%20Web-ExclusivePubs/Defense%20Reports/DR00-1.pdf.

such, the QDR was published as the "overall strategic planning document," that examined "America's defense needs from 1997 to 2015." 106

It is clear by Secretary Cohen's introduction that he and the DoD were looking toward change within the department's service components. Cohen specifically referenced the RMA and its potential impact on future warfighting, as well as a "need to prepare now for the future." Further within the QDR's third section regarding defense strategy, the DoD outlined a need for the services to modernize their forces. However, these modernization efforts were not described as force structure transformation, but rather re-investing in existing weapons and systems and the procurement of modernized replacements.

The 1997 QDR dedicated an entire section of the report to military transformation. Yet, there is no mention of a requirement of the Army or any other service to transform its force structure. Instead section VII referenced *Joint Vision 2010* and the Chairman of the Joint Chiefs of Staff's ambiguous efforts to embrace "information superiority and the technological advances that will transform traditional warfighting via new operational concepts, organizational arrangements, and weapons systems." Additionally, section VII details then on-going Army efforts regarding change by highlighting initiatives such as Force XXI and The Army After Next (AAN) project. However, the language of the reports indicates that these efforts were internally imposed initiatives and that the focus on transformation was the digitization of heavy forces as the timeline of Force XXI fielding was shortened by two years. 110

¹⁰⁶ Department of Defense, *Report of the Quadrennial Defense Review*, (May 1997), under "Section I: Design, Approach, and Implementation of the Quadrennial Defense Review," http://www.dod.gov/pubs/qdr/toc.html.

¹⁰⁷ Ibid., under "The Secretary's Message."

¹⁰⁸ Ibid., under "Section VII: Transforming U.S. Forces for the Future."

¹⁰⁹ Force XXI was an effort to digitize the Army's heavy forces while The Army After Next Program was a conceptual undertaking that looked at changes to the Army's light forces of the future. Both of these efforts will be discussed in greater detail in this Chapter's third section.

¹¹⁰ Department of Defense, *Report of the Quadrennial Defense Review*, (May 1997), under "Section VII: Transforming U.S. Forces for the Future."

In addition to the release of the QDR, 1997 saw the publication of the National Defense Panel's *Transforming Defense: National Security in the 21st Century*. Prepared for the Secretary of Defense, the panel's report was prepared by a number outside defense experts and retired general officers. Although the panel's report was not prepared by the DoD, nor did it speak on behalf of the department, it is included here for a number of reasons. First, the panel's work could have influenced the SECDEF or other civilian leaders to act. Further, the report was specifically focused on transformation and provided pointed recommendations regarding the direction that transformation should take America's military forces. Last, a failure to heed the advice put forth in the report could indicate an unwillingness of the Secretary of Defense or other leaders to enact change.

Like the QDR, the National Defense Panel (NPD) looked at the potential changes in the security environment and the United States military posture. However, the panel argued that while America's military forces were suited to then current threats, the military would be poorly prepared for the future. 111 While the Secretary's message at the outset of the QDR noted a need to prepare for the future, the NDP argued that the DoD should go further by actually according "the highest priority to executing a transformation strategy." 112 Further, the panel placed a premium on the United States' ability to project military power across the globe. As such, the panel recommended that the DoD undertake efforts to decrease its logistics footprint while increasing its operational range, speed, and mobility. In particular the panel urged that land forces gain expeditionary capabilities and reduce the reliance on heavy, hard to move combat systems. 113

If the NDP's recommendations made any impact on Secretary Cohen in the immediate period after the report's release, it does not appear that they were acted upon in regards to forcing the Army to change. This is not to say that the SECDEF or other civilian leaders did not influence the Army's decision. One such instance of indirect influence from a civilian may have come from Assistant Secretary of Defense John J.

¹¹¹ National Defense Panel, Transforming Defense, 1.

¹¹² Ibid., iv.

¹¹³ Ibid., 33, 44–47.

Hamre who said in August 1999 that "if the Army holds onto nostalgic versions of its grand past, it is going to atrophy and die." ¹¹⁴ The most telling impact of direct influence from the Secretary of Defense came from Secretary of the Army, Louis Caldera, who testified before House Armed Services Committee that "Secretary Cohen's charge to me and to General Shinseki," was "to leverage technology and transform our forces so that they will be more relevant and responsive to the needs of the nation in the 21st century. And that includes our ability to get to the hot spots faster with the right force to get the job done." ¹¹⁵

There is further anecdotal evidence that Secretary Cohen may have ordered the Army to transform in light of the slow and problem-filled deployment of Task Force Hawk to Kosovo earlier in 1999. 116 Had Cohen ordered the Army to change because of a well-publicized unfavorable incident, such a decision is consistent with one of Posen's causes of innovation that states "disasters fresh in a state's memory are great promoters of civilian intervention, even if no immediate threat appears on the horizon." 117 The failure of Task Force Hawk as an influence on the SECDEF may explain why transformation was not pursued at an earlier time when the QDR and the NDP identified

¹¹⁴ Colin Clark and George Seffers, "Hamre to U.S. Army: Rethink Future War Strategy," *Defense News*, September 6, 1999, 6.

¹¹⁵ Fiscal Year 2001 National Defense Authorization Budget Request: Hearing Before the Committee on Armed Services, United States House of Representitives, 106th Cong. (2000) (statement of the Honorable Louis Caldera, Secretary of the Army). http://lobby.la.psu.edu/016 Funding for CH47/Congressional Hearings/Testimony/H Armed Services C aldera_etal_032200.htm

¹¹⁶ According to Bruce R. Nardulli, Walter J. Perry, Bruce Pirnie, John Gordon IV, John G. McGinn, *Disjointed War: Military Operations in Kosovo, 1999* (Santa Monica: RAND, 2002), 58–95, Task Force Hawk made up of two attack aviation battalions equipped with Apache helicopters, a mechanized infantry battalion, elements of a light infantry battalion, a task–organized artillery battalion equipped with the multiple launch rocket system and howitzers, and associated support units. In total, some 5,100 personnel were involved. The Task Force deployed to Albania in April–May 1999 to support the NATO air campaign in Kosovo. Although NATO requested that the task force be prepared to conduct operations by April 23, it would not achieve full operational capability until May 7, 1999. The movement of forces was plagued by a changing force structure and by the conditions at Albania's Ritnas airport, where units and equipment were set to deploy to. While Task Force Hawk's deployment was slower than anticipated, it appears that the timeline did not impact the readiness of the unit. However, the task force was never employed due to concerns regarding aircraft vulnerabilities and enemy anti-aircraft capabilities.; Greg Jaffe in "Army Scrambles for Funds as it Pursues Modernization," *Wall Street Journal*, April 18, 2000, A20, echoed Caldera's assertion that "the Army got an order from Defense Secretary William Cohen last spring: Get lighter, faster and more mobile and make it happen quickly."

¹¹⁷ Posen, The Sources of Military Doctrine, 76.

a need. However, the impact of civilian intervention on the Army's transformation effort likely transcended one single decision or statement by any single civilian leader.

Secretary Caldera's testimony and Assistant Secretary Hamre's statement are the only concrete pieces of evidence that were uncovered supporting civilian intervention into the Army's decision to transform. Events and analysis that took place after those statements cast a shadow of doubt regarding the intensity of civilian intervention. This is especially true regarding the funding required for the Army to change. Secretary Cohen had the ability to force the Army to restructure its budget, or to provide additional funds from within the DoD budget that would support transformation. However, it appears that Cohen was unwilling to force the Army to focus spending on transformation as he did not demand the funding termination of underperforming or unneeded combat systems. Further, Cohen did not restructure the DoD budget to assist the Army's effort; instead the Army was forced to fund transformation efforts while paying for the service's day to day operating costs. 118

It is clear that there was some level of civilian influence regarding the Army's decision to transform. However, it is unclear how much civilian leaders pressured the Army to do so. Perhaps most telling is that there are very few primary sources that indicate that civilian leaders from outside the Army impacted change. The implication here is that a lack of sources indicates a lack of robust influence. Further, if transformation was being pushed upon the Army it is likely that the DoD would have spurred this change by providing funds or forcing the service to spend differently.

Finally, military transformation can be considered an important and difficult undertaking. As Chapter IV will demonstrate, the Bush Administration and Secretary of Defense Donald Rumsfeld pursued transformation in a more aggressive manner. As such, a budget was specifically established for transformation and a "transformation Czar," was appointed in 2001. Despite the clear indications put forth in the QDR and in the NDP's report that change was necessary, and the direct and indirect influences on the Army to

¹¹⁸ Jaffe, "Army Scrambles for Funds as it Pursues Modernization"; Adams, The Army After Next, 92.

¹¹⁹ Hans Binnendijk, "Introduction," in *Transforming America's Military*, ed. Hans Binnendijk (Washington DC: National Defense University Press, 2002), xix.

transform, no measures like those taken by Rumsfeld were called for by Cohen or any other civilian leaders. While civilian intervention influenced the Army's decision to transform, the evidence suggests that it was not the only or driving force behind it.

C. TRANSFORMATION: CHANGE FROM WITHIN

This section will examine this Chapter's third hypothesis that asserts that the Army's decision to begin transformation and create the SBCT was largely the result of innovative thinking from the Army's top uniformed and civilian leaders and their staffs. To do so, this section will seek to demonstrate that evidence exists that is consistent with Stephen Peter Rosen's argument that "peacetime military innovation occurs when respected senior military officers formulate a strategy for innovation, which has both intellectual and organizational components." Further, because Rosen also indicates that change that originates from within an organization is often a timely process, this section will examine some of the Army's pre-transformational efforts to change. 121

In a period that exceeded just over two years, the Army tested and selected a new combat vehicle, as well as developed doctrine and training programs allowing it to quickly transform a legacy brigade to a SBCT. The Army's ability to rapidly execute such a decision may have ultimately been the result of the will and innovation of top uniformed and civilian leaders from within the organization, but there is evidence that previous efforts to re-examine capabilities and force structure assisted transformation and its associated concepts. One such effort, the High Tech Light Division (HTLD) from the early 1980s sought to leverage technology to improve the lethality and mobility of the Army's light infantry forces. 122 Although the Army's experimental force, the 9th ID, was unable to successfully harness technology in a meaningful way that influenced force structure changes prior to 1999's transformation, there was some benefit. As such, both Shinseki and Dubik referenced the 9th Infantry experiment as both a lesson on how not to

¹²⁰ Rosen, Winning the Next War, 23.

¹²¹ Rosen, Winning the Next War, 105.

¹²² Glen R. Hawkins and James Jay Carafano, *Prelude to Army XXI: U.S. Army Division Design Initiatives and Experiments 1917–1995* (Washington DC: United States Army Center of Military History, 1997), under "Part Three," http://www.fas.org/man/dod-101/army/unit/docs/xxi/xxipart3.htm.

go about transformation, but also as a valuable effort because the Army was able to capitalize upon some of the concepts and ideas many years after the fact. 123

In the aftermath of the HTLD experiments of the 1980s and the success of the 1991 Gulf War, the Army continued to pursue new ways to improve the organization. The impetus for pre-transformational Army change appears to have originated from General Gordon R. Sullivan. Sullivan, while serving as the Army Chief of Staff initiated the Army's modern Louisiana maneuvers, which sought to conduct experiments and simulations "to test proposed doctrine, procedures, organizations, and equipment." From these computer-simulated, virtual maneuvers grew the two most noteworthy innovative efforts, the development of Force XXI and the Army After Next project.

As an output of Sullivan's "new strategic vision," Force XXI sought to leverage newly emerging information technologies into the Army's pre-existing force structure. 126 At its core, Force XXI centered on the development and use of the tactical internet to digitize the Army's heavy formations. To do so, experimentation efforts began in 1993, and by 1996 the 4th Infantry Division was designated as the Army's experimental force. While the infusion of technology was the overarching goal of Force XXI, the Army did alter the 4th ID's force structure slightly. 127 In addition, experimentation sought to develop new concepts, identify potential organizational design changes, as well as determine the optimal employment methods for digitized forces. 128

While Force XXI sought to digitize the Army's heavy forces, the Army After Next project, which was initiated in 1996, was aimed toward developing the total force

¹²³ Public Broadcasting Service, *The Future of War*, "Interview: General Eric K. Shinseki;" Public Broadcasting Service, *The Future of War*, "Interview: Major General James Dubik."

¹²⁴ General Sullivan served as the Army Chief of Staff from June 1991 to June 1995.

¹²⁵ James L. Yarrison, *The Modern Louisiana Maneuvers* (Washington, DC: United States Army Center of Military History, 1999), iv.

¹²⁶ Mark J. Reardon and Jeffery A. Charlston, *From Transformation to Combat: The First Stryker Brigade at War* (Washington DC: United States Army Center of Military History, 2007), 1.

¹²⁷ Reardon and Charlston, *From Transformation to Combat*, 1, note that although the 4th ID was slightly smaller in total number of assigned personnel, the division had more infantry units and fire–support systems, as well as increased reconnaissance and intelligence capabilities.

¹²⁸ Thomas R. Goedkoop and Barry E. Venable, "Task Force XXI: An Overview," *Military Review* 79, no. 2 (May/June 1999), 71.

for the challenges of the future. Spurred by General Dennis J. Reimer, Sullivan's successor as Army Chief of Staff, the AAN project sought to "explore new concepts and capabilities;" this included a number of potential future force structures. 129 While the AAN project was largely conceptual in nature, its roots did not stray far from the development of Force XXI as the AAN was focused heavily upon the increased use of information technologies. 130 The true potential and vision that Reimer had for the AAN project, however, was not to be known, as his successor, Shinseki would outline a new vision of transformation shortly after assuming his post as Army Chief of Staff.

There is little doubt that the Army moved very rapidly after Shinseki announced his decision to begin Army transformation. Although such speed runs contrary to Rosen's assertion that change from within an organization is usually a slow endeavor, the Army's ability to transform quickly may be traced to the previous efforts indentified above. Both Shinseki and Dubik mentioned the failed experimentation attempt of the 9th ID in the 1980s as a valuable lesson from which the Army could learn from moving forward. Further, Dubik mentioned the Louisiana Maneuver Task Force, a number of war-fighting experiments from 1994 to 1998, and the 4th ID's development of Force XXI as initiatives that the Army leveraged to develop the SBCT and the Objective Force. 131

When looking for evidence that innovative thinking from within the Army was the catalyst spurring transformation it is important to understand why the senior officers leading the change pursued a new direction, as well as the strategy that they pursued to enact the decision. In numerous appearances before Congress, Shinseki outlined the need for transformation. First and foremost, he cited a need for the Army to transform "to better meet current and future strategic requirements." While many of these

¹²⁹ John Matsumura, Randall Steeb, Thomas Herbert, Scot Eisenhard, John Gordon, Mark Lees, and Gail Halverson, *The Army After Next: Exploring Concepts and Technologies for the Light Battle Force* (Santa Monica: RAND, 1999), v, vi.

¹³⁰ Dennis J. Reimer, "The Army After Next: Knowledge, Speed and Power," *Military Review* 79, no. 2 (May/June 1999), 3.

¹³¹Public Broadcasting Service, *The Future of War*, "Interview: Major General James Dubik."

¹³² Fiscal Year 2001 Budget and Posture of the United States Army: Hearing Before the Committee on Armed Services, United States Senate, 106th Cong. 4 (2000) (statement of General Eric K. Shinseki, U.S. Army Chief of Staff).

requirements were the result of a changed security environment, a number also resided within the roles and missions that the Army could expect to execute as outlined earlier in this Chapter. In regards to the creation of the SBCT, Shinseki routinely argued the Army's need for a combat ready brigade-sized force that could deploy anywhere in world within 96 hours which could operate across the full-spectrum of military operations. ¹³³

The need to change may have been based in large part to the security environment and the Army's expected roles and missions, but such a need was nothing new. Much like Shinseki's rationale for transformation, Reimer's AAN project was based on need to get faster and more powerful. Yet one of the many differences between the AAN and Shinseki's transformation initiative was that Shinseki had a clear strategy for transformation while the AAN was based solely in concept. By outlining the transformation along three pathways: the legacy, interim (SBCT), and objective forces, Shinseki's strategy sought to focus on the medium term with the SBCT, the future by experimentation with the objective force, and the then current term by retaining the legacy force to act as a hedge against potential failures. 135

The Army's transformation strategy did not start and stop with the creation or retention of military units, but also sought to change doctrine and leader development. The creation of the SBCT was significant in that it was a new unit type with a new combat platform, but also in that it was the Army's test bed for doctrine and training development. Major General Dubik asserted that the organizational change and vehicle development and fielding were the easy parts, and that doctrine, training, and leader development were the more difficult tasks associated with transformation. The

¹³³ Status of Forces: Hearing Before the Committee on Armed Services, United States Senate, 106th Cong. 5 (1999) (statement of General Eric K. Shinseki, U.S. Army Chief of Staff); The Army Transformation: Hearing Before the Airland Subcommittee, Committee on Armed Services, United States Senate, 106th Cong. 6 (1999) (statement of General Eric K. Shinseki, U.S. Army Chief of Staff); Public Broadcasting Service, The Future of War, "Interview: General Eric K. Shinseki."

¹³⁴ Reimer, "The Army After Next: Knowledge, Speed and Power," 3–4.

¹³⁵ Analysis of Shinseki's strategy is based upon Binnendijk's definition of transformation found in Hans Binnendijk, "Introduction," in *Transforming America's Military*, xxi.

¹³⁶Public Broadcasting Service, *The Future of War*, "Interview: Major General James Dubik."

inclusion of intellectual components within the SBCT's creation highlights the forethought and robustness of Shinseki's strategy.

Although Shinseki did not wish to receive credit for his decision to begin transformation and create the SBCT, he has been identified as one of, if not the greatest influence regarding the change. Dubik cited Shinseki's vision and his desire to enact transformation in regards to the Army's ability to move as quickly as it did. 137 Shinseki himself understood that his opportunity was unprecedented during a time of peace, and that his time to influence transformation would only last the four years he was allowed to serve as Army Chief of Staff. 138 Perhaps it was the specter of a fleeting opportunity that motivated him to force the Army to change as rapidly as it did.

The evidence that points toward change from within the Army as the driver behind the decision to begin transformation stems from innovation and leadership from Shinseki and Dubik. However, because the Army could be expected to anticipate changes in the security environment and should be responsive to its external civilian leadership, it is unlikely that such a decision to transform is without any external influence. Further, even if the creation of the SBCT was the result of innovative thinking and the leadership of top Army officers, there were a number of previous attempts from which lessons and analysis could be drawn from. This is not to downplay the role that many Army leaders, but to highlight that there are many factors that could influence such an important decision.

Clearly, the security environment was a major factor behind Shinseki's decision. Further, the many previous innovation efforts and experiments provided lessons and analysis that the Army could draw upon. However, Shinseki's transformation vision had a clear strategy that not only included structural changes to the Army's organization but also intellectual changes as well. In sum, the evidence suggests the Army's decision to

¹³⁷ Ibid.; Dubik PBS interview.

¹³⁸ The Army Transformation: Hearing Before the Airland Subcommittee, Committee on Armed Services, United States Senate, 106th Cong. 9–10 (1999) (statement of General Eric K. Shinseki, U.S. Army Chief of Staff); Public Broadcasting Service, The Future of War, "Interview: General Eric K. Shinseki."

transform can be attributed to change from within the organization itself in a manner that is consistent with Rosen's argument regarding military innovation.

D. CONCLUSION

This chapter sought to investigate three hypotheses that may explain why the Army began a transformation initiative in 1999. The first hypothesis argued that the decision to transform was based upon changes to the security environment and the Army's anticipated roles and missions. The second hypothesis was rooted in the belief that the decision was forced upon the Army by its civilian leaders. The third hypothesis suggests that the Army's decision was based within innovative leadership from within the service that spurred the change. The evidence gathered in this chapter suggests that each hypothesis can explain the Army's decision to a certain degree.

The hypothesis with the strongest case is the first, which assigns causality for the Army's decision on a changed security environment and the service's expected roles and missions. The Cold War's end coupled with little to no force structure changes, and the frequency of conflict on the lower scale of intensity made it necessary for the Army to develop a full-spectrum force such as the SBCT. However, the changes to the security environment and the Army's roles and missions did not occur just prior to General Shinseki's appointment as Army chief of staff. As such, the third hypothesis also makes a strong case because there were demonstrated efforts to change prior to the transformation announcement that support a longer period of time needed to transform from within, as well as a clear strategy that included organizational change and intellectual components. There is evidence that the second hypothesis factored into the Army's decision as it was stated that Secretary of Defense Cohen directed General Shinseki and Secretary Caldera to make changes. However, because there is a lack of sources that document pertinent factors such as the time frame that such changes should be executed within, as well as evidence that the Secretary of Defense did not restructure the DoD's budget or force the Army to make spending changes, it is unknown how big a role civilian intervention had on the Army's decision.

While a changed security environment and the Army's expected roles and missions likely had the greatest impact on transformation, and change from within the Army is a close second, the answer may be found in combination of the two hypotheses. The need to change was clearly documented in the 1997 QDR as well as within *Joint Vision 2010*, and the NDP's report. Both Shinseki and Dubik cite the changed security environment and the Army's expanded roles and missions as drivers of change, however, such a change could not have occurred without Shinseki's decision in the first place. Further, the Army's plan for transformation was well thought-out and based upon years of experimentation and analysis. The clear transformation strategy, rapidness of execution and subsequent success of the SBCT in combat all point to the likeliness that innovative thinkers within the Army had a preeminent role in transformation.

IV. CASE STUDY: DECISION TO CREATE A BRIGADE-CENTRIC ARMY

Shortly after his appointment in 2003 to replace General Shinseki as Army Chief of Staff, General Peter Schoomaker reaffirmed the Army's commitment to transformation. While Schoomaker's vision for transformation built upon the work of his predecessor in many ways, Schoomaker increased the scope of change to encompass some 17 focus areas, of which, the modularization of brigade combat teams (BCT) became the decisive effort. 139 Like the Army's initial efforts toward modularization, this chapter is chiefly concerned with the creation of the BCT. However, because modularity sought to change the Army's entire force structure, related changes to units above the BCT and to the various support brigades will be discussed as they relate to transformation and modularization within the larger scope of change.

This chapter seeks to examine the Army's decision to focus its transformation efforts on the modular BCT concept through three hypotheses. The first hypothesis suggests that the decision was based upon a changed or changing security environment or to changes in the Army's roles and missions. The second hypothesis argues that the Army's decision to modularize was forced by its civilian leadership. The third hypothesis contends that the Army's decision was the result of change from within through innovative thinking and leadership.

To investigate the three hypotheses, this chapter is mainly concerned with the time period following the Army's decision to create the SBCT through the first few years of the Army's modularization effort. This time frame is notable for a number of reasons that will be discussed throughout the chapter to include the changing of presidential administrations, the appointment of a new Secretary of Defense and Army Chief of Staff, the terrorist attacks of September 11, 2001 (9/11), and the subsequent military operations in Afghanistan and Iraq. This chapter uses a number of primary and secondary sources to

¹³⁹ Army Transformation: Hearing Before the Committee on Armed Services, United States House of Representatives, 108th Cong. 18 (2004) (statement of General Peter J. Schoomaker, U.S. Army Chief of Staff); Department of the Army, 2004 Army Transformation Roadmap, 3–2.

achieve its findings. Chief among these are the *Quadrennial Defense Review* (s) from 2001 and 2006 (hereby known as the 2001 QDR and the 2006 QDR), *The National Defense Strategy of the United States of America* from 2005, the DoD's 2003 *Transformation Planning Guidance*, the Army's 2003 and 2004 Transformation Roadmaps and the 2004 Army Posture Statement. In doing so, this chapter finds that there is evidence that elements from each hypothesis were present in the Army's decision, but that the cause is likely found within civilian intervention forcing change.

A. THE SECURITY ENVIRONMENT AND MODULARITY

The first hypothesis regarding the decision to create modular BCTs argues that the Army's decision was a response to a changed or changing security environment and/or to changed or changing service roles and missions. To prove or disprove this hypothesis it is important to first understand the nature of the security environment of the time, and what was predicted for the future. By late 2003, when modularization became the centerpiece of the Army's transformation, the relative peace associated with the post-Cold War world had been shattered. First and foremost, the terrorist attacks of 9/11 spurred the United States into military operations in Afghanistan and set America on a Global War on Terror (GWOT). The subsequent invasion of Iraq in 2003 under the auspices of the GWOT further entrenched the United States in war. This wartime condition signified the most dramatic change of the security environment and its impact permeates the remainder of this section.

In the time period between September 2001 and Schoomaker's decision to create the modular BCT, there were many perceptions about the security environment. Largely the result of the attacks of 9/11, the threat from non-state actors in the form of terrorism appeared as one of the most prominent characteristics of the security environment that the United States was confronting and one that America could expect to confront in the future. ¹⁴⁰ The elevation of terrorism as a major component in the security environment was highlighted in *The National Security Strategy of the United States of America* from

¹⁴⁰ Department of Defense, *Quadrennial Defense Review Report*, (September 2001), 5; Department of Defense, *Quadrennial Defense Review Report*, (February 2006), 9, 20–24; Department of Defense, *The National Defense Strategy of the United States of America*, (2005), 3.

September 2002 that indicated that terrorism was the main threat and enemy confronting the United States.¹⁴¹ While terrorism was the catalyst for war in Afghanistan, and one of the reasons for the invasion of Iraq, there were other characteristics of the security environment that could have influenced the Army's decision.

Much like the post-Cold War period, the predictions and perceptions of the post-9/11 period's security environment underscored the decreased likeness of traditional state-on-state conflict and highlighted the uncertainty of the future. Such uncertainty was rooted in the inability to predict the source or capabilities of potential adversaries amongst a wide array of actors to include traditional states, non-state actors, and criminal networks. Additionally, there was an uncertainty where future conflicts would arise, and where the United States could potentially employ military forces across a wide spectrum of terrain and geography. Underlying this uncertainty was the perception that potential adversaries would continue to employ asymmetric means to counter American advantages in military capabilities. Further, the United States believed that some adversaries (states or non-state actors) were attempting to acquire weapons of mass destruction (a chemical, biological, or nuclear weapon) that could be used in America or against one of its allies. 143

The perceived uncertain and dangerous security environment had an immense impact on the United States and the Department of Defense during the period that the modular BCT concept was conceived and implemented. This was evident by the development and implementation of new National Security, Defense, and Military strategies that appeared after 9/11. Although two of these documents were released after the Army's decision to create the modular BCT, all three documents maintained a constant theme indicating that the strategic environment was a driving force behind

¹⁴¹ White House, *The National Security Strategy of the United States of America* (Washington, DC: White House, 2002), 5.

¹⁴² Department of Defense, *The National Defense Strategy*, (2005), 2–3.

¹⁴³ Ibid., iii, 2–3; Department of Defense, *Quadrennial Defense Review Report*, (September 2001), 3; Chairman of the Joint Chiefs of Staff (CJCS), *The National Military Strategy of the United States of America*, (2004), viii.

military transformation.¹⁴⁴ Additionally, the DoD's *Transformation Planning Guidance*, from April 2003 and *Military Transformation: A Strategic Approach* published in the Fall of 2003 both stress the importance of a changed and changing the security environment as a catalyst for change.¹⁴⁵

Since the three national strategies referenced above and the two pertinent DoD transformation documents all indicate that the security environment was the main driver of post-9/11 military transformation, it is useful to connect the Army's decision to modularize the force into the greater transformation initiative. The DoD's Transformation Planning Guidance, outlined the scope and strategy of transformation. Within the scope of transformation, the planning guidance required the services to transform how they would fight to include changing organizational designs. 146 Perhaps more importantly, one of the pillars of the planning guidance's strategy was the change of military capabilities through force transformation. While this component of the transformation strategy highlighted the role that technological advances would likely have in regard to information technology and precision-strike capabilities, force transformation also called for the creation of standing joint force headquarters as well as the need for combined arms forces. 147 Within the Army's modular force construct, the Unit of Employment (echelons above the brigade, chiefly the division and corps) was designed to meet the need of a joint force headquarters, while the BCT became the combat arms force of choice. 148

¹⁴⁴ White House, *The National Security Strategy of the United States of America* (2002), 29; Department of Defense, *The National Defense Strategy of the United States of America*, (2005), 2,10; CJCS, *The National Military Strategy of the United States of America* (2004), 23. While two of these documents were released after the Army's 2003 decision, the similarity in the description of the security environment and its mention as a catalyst for transformation indicates a consensus that likely persisted during the period the Army was considering transformation options.

¹⁴⁵ Department of Defense, *Transformation Planning Guidance*, (April 2003), 4; , Director of Force Transformation, Office of the Secretary of Defense, *Military Transformation: A Strategic Approach*, (Fall 2003), 12.

¹⁴⁶ Department of Defense, Transformation Planning Guidance, (April 2003), 6.

¹⁴⁷Ibid., 8–10. "Transformation Planning Guidance," 8–10.

¹⁴⁸ Department of the Army, 2004 Army Posture Statement (February 2004), 15.

Linking the Army's decision to focus transformation on the modular force design within the DoD's broader transformation initiative does not necessarily indicate that the Army found the strategic environment as a motivation for change. The DoD transformation initiative to Army modularization link could indicate that the Army was simply following guidance from its higher authority. However, there is evidence that the security environment was a driving force behind the Army's decision. Descriptions and perceptions of the security environment found in the Army's 2003 and 2004 Transformation Roadmaps and in the 2004 Army Posture Statement echo those found in the 2001 QDR and the national strategies discussed above. As such, these Army documents point to an environment fraught with uncertainty, asymmetry and the threat of terrorism. While the 2004 Army Transformation Roadmap stated that the conversion of the Army's fighting force to the modular BCT construct was the decisive operation in regards to the service's transformation efforts, its reason for doing so were tied to "the new strategic context and the lessons learned in three years of war." 150

The 2004 Army Transformation Roadmap's mention of war as a catalyst for change is important because it tied the nature of the security environment to the Army's roles and missions. Although the military operations in Iraq and Afghanistan did not alter the Army's primary mission to provide land forces that could fight and win the nation's wars, the events of 9/11 resulted in increased requirements for the Army (both active and reserve components) to support homeland defense operations. In addition to homeland defense operations and combat operations in Iraq and Afghanistan, the Army continued to provide forces to support operations in the Balkans and in the Sinai, as well as maintain forward stationed units in Germany, and the Republic of Korea. The significance of these operations and of the force posture is that by the end of fiscal year 2003, the Army had mobilized over 164,000 Reservists and National Guardsmen,

¹⁴⁹ Department of the Army, *United States Army 2003 Transformation Roadmap* (Washington, DC: GPO, 2003), ix; Department of the Army, *2004 Army Transformation Roadmap*, 1-1; Department of the Army, *2004 Army Posture Statement*, 2.

¹⁵⁰ Department of the Army, 2004 Army Transformation Roadmap, 1-1.

¹⁵¹ Department of the Army, 2004 Army Posture Statement, 1,3.

¹⁵² Ibid., 3.

deployed nearly two-thirds of its combat formations (both active and reserve component), and had more than 325,000 soldiers employed overseas. 153

The high percentage of deployed combat units and soldiers serving overseas was a reflection of the Army's evolving roles and missions. While the service continued to execute enduring operations such as the forward stationing of forces in Korea, the combat operations in Iraq and Afghanistan signaled a movement toward a more expeditionary focus as part of the GWOT. Such an expeditionary focus was not however tied to a timeline that required a rapid termination of combat operations. For its part in the GWOT, the Army contended that such operations would require the sustainment of its expeditionary forces and capabilities over a long duration. The need to sustain and generate combat forces of an expeditionary nature in response to the Army's changing roles and missions can be seen as one possible motive to focus transformation on the modularization of BCTs.

The conversion of the Army's conventional fighting forces into the modular BCT concept provided many of the resources that the service and the DoD required. By placing additional sustainment capabilities and organic reconnaissance, and field artillery battalions within the modular construct, the Army believed that the BCT would be a self-sustaining organization more capable to conduct expeditionary operations. Further, the standardization of all of the Army's conventional fighting forces at the brigade level could increase deployability as BCTs would not require the support from echelons above brigade (mainly the Army's division and corps level sustainment and artillery units) to achieve the task-organization needed for the unit to carry out its wartime missions. So Not only would the modular BCT make it easier to deploy force because the need to task organize was removed, but when compared with the premodular designs, the BCT could be deploy more quickly as these units could load more

¹⁵³Ibid., 3,8.

¹⁵⁴ Department of the Army, 2004 Army Transformation Roadmap, 1–2.

¹⁵⁵ Ibid... 3-4.

¹⁵⁶ Ibid., 3–1.

combat power on a decreased number of required strategic transportation assets such as C-17 aircraft and Large, Medium-Speed, Roll-on/Roll-off Ships. 157

In addition to the increased expeditionary capabilities and deployability that modularization could produce, doing so would also increase the number of available conventional combat units. The pre-modular Army numbered some thirty-three Active and thirty-six National Guard combat brigades. One of Schoomaker's objectives of modularity was to increase the number of deployable brigades to between seventy-seven and eight-one BCTs. This increase of up to twelve brigades was to be done by only increasing the Army's end strength by some 30,000 active-duty soldiers. Such an increase was desired to reduce the strains of the operations in Iraq and Afghanistan placed on units, soldiers, and leaders by increasing the time between deployments and allowing crucial reset, training, and preparation activities before being recommitted. Considering that the strains of combat operations were visible after only two plus years in Afghanistan and less than one year in Iraq, and that Schoomaker sought the growth of BCTs through minimal end strength growth, it is clear that the increased roles and missions that the Army was conducting during a time of increased operational tempo played a role in the Army's decision to modularize the force.

A changed or changing security environment and changes to the roles and missions appears to have spurred the Army's decision to move from a division-centric force to a force that relied on the modular BCT as its primary combat formation. There is no question that the security environment impacted the United States as a driver of broader military transformation. Similarly, the security environment was noted as a driver of Army transformation, of which modularization became the primary focal point. This was demonstrated most clearly in the 2004 Army Posture Statement that plainly states the

¹⁵⁷ U.S. Army Training and Doctrine Command, Army Guide to Modularity Version 1.0, 10-4.

¹⁵⁸ William M. Donnelly, *Transforming an Army at War: Designing the Modular Force, 1991–2005* (Washington, DC: United States Army Center of Military History, 2007), 21–22; Johnson and others, *A Review of the Army's Modular Force Structure,* 17, notes that the number of Active BCTs eventually grew to 45 total in 2010.

¹⁵⁹ Department of the Army, 2004 Army Posture Statement, 3.

"strategic environment—our mandate for transformation." ¹⁶⁰ Further, the Army's expanded roles and missions, most apparent in the GWOT and in operations in Afghanistan and Iraq appeared as source of change. Finally, the conversion to modular BCTs promoted increased expeditionary capabilities and deployability while growing the numbers of available forces through a minimal increase of the Army's active duty end strength.

B. CIVILIAN INTERVENTION AND MODULARITY

The second hypothesis concerning the decision to modularize the force argues that the Army responded to the desires of civilian leaders that were forcing the service to change. For this to occur, the nation's top civilian leadership concerned with military matters such as the president of the United States or his appointed secretary of defense would be expected to play crucial roles in the Army's decision to focus transformation efforts on modularization. This hypothesis is applicable to the post-9/11 American military situation and is constant with Barry Posen's balance of power innovation theory where civilian intervention is likely to induce change when war is likely or underway. ¹⁶¹ To identify evidence linking civilian intervention to the Army's focal transformation effort, this section will examine a number of documents originating from the White House and the DoD, as well as speeches from America's civilian leadership.

In the time period between the Army's decision to create the SBCT in 1999, and the 2003 effort to focus transformation on modularization, a number of changes in the domestic political arena had occurred. Most notable was the election of President George W. Bush in 2000, and his subsequent appointment of Donald Rumsfeld as secretary of defense. Beginning with the 2001 inauguration, both Bush and Rumsfeld would occupy their offices while the Army developed and initially implemented its modularization

¹⁶⁰ Ibid., 1.

¹⁶¹ Barry Posen, The Sources of Military Doctrine, 59, 75.

strategy. ¹⁶² According to Rumsfeld, the notion of wide-spread military transformation was on the Bush Administration's agenda prior to coming to power. ¹⁶³

It did not take long for the president's transformation initiatives to take hold within the DoD. Immediately upon assuming office, Secretary Rumsfeld began the task of transforming the military, although not all of the themes and direction that transformation would take originated from the secretary. 164 The first manifestation of transformation initiatives appeared in the 2001 *Quadrennial Defense Review Report* which was issued only two weeks after the events of 9/11. 165 While the 2001 QDR was notable because it articulated changes to the nation's defense strategy, force planning focus, and global military posture, but more importantly for transformation, the document dedicated an entire nineteen page Chapter on changing the military. 166 Although the mention of a need for military change was present in the previous QDR from 1997, the 2001 QDR differed in that it identified operational goals tied to the transformation effort. 167 Further, the report made specific mention of the need for military forces that must be modular and more deployable. 168

Although the 2001 QDR drew a connection between the strategic environment as a driver of change, implied in the report was a need to spur the military services to change. Within the 2001 QDR was mention of the establishment of the Office of Force Transformation, whose director, Arthur Cebrowski reported directly to the SECDEF to "evaluate the transformation efforts of the Military Departments and promote synergy by

¹⁶² While modularization efforts would continue until 2010, by the time of Rumsfeld's resignation in 2006 the Army was well on its way to modularize the force.

¹⁶³ Department of Defense, "Secretary Rumsfeld Speaks on "21st Century Transformation of U.S. Armed Forces," January 31, 2003; Donald Rumsfeld, *Known and Unknown: A Memoir* (New York: Penguin, 2011), 280.

¹⁶⁴ Rumsfeld, Known and Unknown, 293–294.

¹⁶⁵ Michele A. Flournoy, "Forward," in *QDR 2001: Strategy–Driven Choices for America's Security*, ed. Michele A. Flournoy, (Washington, DC: National Defense University Press, 2001), xi, notes that the 2001 QDR effort started as far back as 1999.

¹⁶⁶ Department of Defense, *Quadrennial Defense Review Report*, (September 2001), 14, 17, 25, 29–48.

¹⁶⁷ Ibid., 29-30.

¹⁶⁸ Ibid., 32.

recommending steps to integrate ongoing transformation activities." ¹⁶⁹ The establishment of the Office of Force Transformation and the appointment of a director of transformation indicates that military change would be driven from the senior civilian leadership within the Pentagon. Further evidence of civilian intervention proceeded in short order with the release of DoD transformation documents released in 2003.

The first document to focus solely on change was the DoD's *Transformation Planning Guidance*, from April 2003.¹⁷⁰ Starting with a foreword from Secretary Rumsfeld, the document outlined the department's approach and strategy for transformation.¹⁷¹ Further the guidance assigned roles and responsibilities for senior civilian and uniformed leaders of the DoD and the service components. Although the document demonstrated an attempt to approach transformation through a collaborative effort between DoD and military service leaders, it appears that Secretary Rumsfeld was the ultimate authority. As such, the planning document stated that the SECDEF would have "the final approval authority on all major elements of the transformation strategy," as well as establish the "policies and objectives," regarding transformation.¹⁷²

Additional evidence that indicates that transformation was driven by civilian intervention is found in a number of strategic documents that span the period from 2002 through 2005. Released in 2002, *The National Security Strategy of the United States of America* (NSS) was the first in a series of documents to outline tenets of the new strategy set forth by the Bush Administration and the DoD. Although the document cut a broad swath through security issues facing America and new ways to confront them, transformation was deemed important as a section of the strategy was dedicated to the issue. While the scope of the strategy in regards to transformation was concerned with all

¹⁶⁹ Ibid., 29.

¹⁷⁰ The Director of Force Transformation, Office of the Secretary of Defense, *Military Transformation: A Strategic Approach*, was published in the fall of 2003. Although this document benefited from a more polished format to include a number of charts and illustrations, its central theme was constant with the 2003 planning guidance. Therefore, *Military Transformation* will not be discussed further in this section.

¹⁷¹ Department of Defense, Transformation Planning Guidance, 1.

¹⁷² Ibid., 12.

of America's national security institutions, specific mention of military transformation to include expeditionary maneuver forces were included in the document. 173

Following the 2002 NSS, the DoD released *The National Military Strategy of the United States of America* (NMS) of 2004, and The National Defense Strategy (NDS) of 2005.¹⁷⁴ While the NMS originated from the Office of the Chairman of the Joint Chiefs of Staff, its discussion of change focused broadly on achieving full spectrum dominance within the DoD's (i.e., civilian leaders) greater transformation goals in support of the NDS that would appear one year later.¹⁷⁵ The NDS for its part was focused on the four strategic objectives for the DoD in support of the president's NSS. However, the NDS specifically mentioned a need to continuously transform, especially to achieve the force capabilities that the DoD would need to meet its strategic objectives.¹⁷⁶

A constant theme running through the 2001 QDR and the strategies discussed above is a need to transform the military. Since the NSS originated from President Bush, and the NDS from Secretary Rumsfeld, one can trace the origin of transformation to these civilian leaders. Additionally, the 2003 *Transformation Planning Guidance*, delineated roles and responsibilities regarding change. As the SECDEF, Rumsfeld had the final say regarding transformation decisions, and the direction transformation would take. Further making a case for civilian intervention was the Director of Force Transformation, Arthur Cebrowski gave a speech where he stated that "the real directors of transformation are the

¹⁷³ White House, *The National Security Strategy of the United States of America* (Washington, DC: White House, 2002), 29–30.

¹⁷⁴ While both of these documents were released after the Army's decision in 2003, they have been included to demonstrate that transformation was a central theme originating from the upper levels of the DoD. Further, both of these documents support the NSS, which indicates that the ideas and objectives found within them likely spanned as far back as 2002.

¹⁷⁵ Chairman of the Joint Chiefs of Staff (CJCS), *The National Military Strategy of the United States of America* (2004), 1, 23–26. Although the NMS makes mention of the National Defense Strategy that would be released one year later; this oddity indicates that the tenants of the defense strategy were apparent will before it was issued.

¹⁷⁶ Department of Defense, *The National Defense Strategy of the United States of America*, (2005), 6–7, 10, 12.

president and the secretary of defense," as they "have elevated transformation to the level of national strategy, national military strategy, corporate strategy and risk management strategy." 177

Cebrowski's assertion is substantiated by remarks made by both the president and the SECDEF. President Bush remarked in a December, 2001 speech that he foresaw a need to transform the military before 9/11. However, the terrorist attacks appeared to have elevated and increased the tempo of military change as the president set military transformation as the nation's top enduring priority. This sentiment was echoed by Secretary Rumsfeld who stated that his orders from the outset by the president included the establishment of a new defense strategy that included transformation to make America's military lighter, more mobile, and lethal. 179

It is clear that America's top civilian leaders drove transformation, thus making a strong case for civilian intervention regarding the Army's decision to focus efforts on the modular BCT. As the Army's decision would enact modularity across the service's entire conventional fighting force, doing so would bring about the modularity called for by the 2001 QDR. As discussed earlier, the modular BCT was perceived to be more deployable and expeditionary. These characteristics were consistent with the requirements to make the military more mobile and lethal as set forth by the president and acted upon by the SECDEF. While it is conceivable that the Army made its decision to develop a modular capability without civilian intervention, the overwhelming number of documents and statements above related to or mentioning transformation and the indications that military change was proceeding from the highest levels of American government make such a possibility remote.

¹⁷⁷ Department of Defense, "Speech by VADM Arthur Cebrowski to the Network Centric Warfare Conference," *Transformation Trends*, (17 February Issue) 22 January 2003.

¹⁷⁸ White House, "President Speaks on War Effort to Citadel Cadets," December 11, 2001.

¹⁷⁹ Department of Defense, "Secretary Rumsfeld Speaks on "21st Century Transformation of U.S. Armed Forces," January 31, 2003; Donald Rumsfeld, *Known and Unknown*, 294.

C. CHANGE FROM WITHIN AND INNOVATIVE THINKING

The third hypothesis asserts that the Army's decision to focus transformation efforts on the modular BCT concept was the result of innovative thinking from the Army's top uniformed and civilian leaders and their staffs. The wartime condition under which the Army executed its transition to modularization is noteworthy. According to Stephen Peter Rosen, military organizations such as the Army would be motivated to act in a time of war and would have "the strongest possible incentives to learn rationally from its experiences." ¹⁸⁰ It is from these experiences and others gained during the Army's initial transformation effort to include the creation of the SBCT where evidence of change from within may be found.

Starting with General Schoomaker's order to the Army's Training and Doctrine Command (TRADOC) in September 2003, the service would make modularization its transformation priority. By July 2004, the Army had completed the modular BCT design and had already converted three brigades from the 3rd Infantry Division and began to convert both the 10th Mountain Division and the 101st Infantry Division (Air Assault) to the new organizational structure. While the Army would not complete modularization of its conventional combat forces until 2010, the initial phase of the transformation moved very quickly. The rapidness of such an endeavor was likely made possible by a number of initiatives dating back to the mid-1990s.

The modular concept was not new upon Schoomaker's appointment as Army Chief of Staff. Schoomaker's predecessor, General Shinseki referenced the unit of action (the former term associated with the BCT) when discussing the future objective force as conceived during the initial stages of Army transformation. Further, according to William Donnelly's *Transforming an Army at War: Designing the Modular Force, 1991–1995* the idea of modularity had become key characteristic that Shinseki and the Army

¹⁸⁰ Stephen Peter Rosen, Winning the Next War, 22.

¹⁸¹ Donnelly, Transforming an Army at War, iii.

¹⁸² Department of the Army, 2004 Army Transformation Roadmap, 6-1.

¹⁸³The Posture of the United States Army: Hearing Before the Committee on Armed Services, United States House of Senate. 108th Cong. 35 (2003) (statement of General Eric K. Shinseki, U.S. Army Chief of Staff).

were basing all future force designs. ¹⁸⁴ Although one of modularization's outputs was a decreased dependency upon the division to provide assets the brigade would need on a regular basis, from an organizational design standpoint, the modular BCT had many similarities with the SBCT. ¹⁸⁵ As Chapter III demonstrated, the creation of the SBCT benefited from a number of previous experiments and projects. When remarking on the development of the modular BCT, Lieutenant General John Curran, the deputy TRADOC commander responsible for the future force noted how the development of the SBCT and the objective force under Shinseki and the Army's earlier attempts during the Force XXI experiments and Army After Next project provided the analytics that drove the modular design. ¹⁸⁶

Schoomaker himself acknowledged Shinseki's impact on transformation when he testified that "General Shinseki started major transformational efforts in the Army that we are building on today, and he deserves a great deal of credit for setting the stage for an awful lot of the things we are doing." However, this is not to say that Schoomaker did not have an impact on the decision to impart modularity. For his part, Schoomaker appears to have attempted to place his vision on Army transformation by making subtle, yet important terminology changes when he renamed Shinseki's legacy, interim, and objective forces to the Army's current and future forces. Restablished modularity as the Army's transformational priority, and established Task Force Modularity as an ad hoc organization within TRADOC.

¹⁸⁴ Donnelly, Transforming an Army at War, 13.

¹⁸⁵ While the SBCT counted three infantry battalions, opposed to the two combined arms battalions found with the HBCT or the two infantry battalions in the IBCT, the SBCT, HBCT, and IBCT all had similar artillery, reconnaissance, and sustainment capabilities found within their subordinate battalions and special companies.

¹⁸⁶ Army Transformation: Hearing Before the Committee on Armed Services, United States House of Representatives, 108th Cong. (2004) (statement of Lieutenant General John M. Curran, U.S. Army, Deputy Commanding General, Futures, U.S. Army Training and Doctrine Command).

¹⁸⁷ Army Transformation: Hearing Before the Committee on Armed Services, United States House of Representatives, 108th Cong. 18 (2004) (statement of General Peter J. Schoomaker, U.S. Army Chief of Staff).

¹⁸⁸ Ibid., 22–23.

¹⁸⁹ Donnelly, *Transforming an Army at War*, iv, notes that Task Force Modularity was responsible for the design of the Army's heavy and infantry BCTs before being disbanded in 2005.

While it is clear that the Army developed the modular BCT concept through an internal process, it is unclear if the decision to implement the design was the result of innovative thinking on behalf of the Army's top leaders, or a response to the security environment or to civilian intervention. As this Chapter's first section demonstrated, the security environment was powerful motivator for change across the DoD and within the Army. Schoomaker himself testified to the impact of the GWOT and the security environment as a factor influencing transformation and modularization. ¹⁹⁰ Further as section two determined, there was a great deal of influence regarding military change emanating from the White House and the Pentagon. However, both the perceived changes to the security environment and civilian pressure persisted from as early as 2001.

The unique timing of the Army's decision helps slightly to clear up the question at hand. The preponderance of evidence that suggests that Shinseki's term as Army Chief of Staff existed in a time of strong civilian intervention and that modularity was an idea underpinning the Army's future force developments suggests that a decision to modularize the force could have been made earlier than late 2003. As such, Schoomaker alluded to missed transformational opportunities when testifying before Congress in 2004. However, he also pointed to increased funding resulting from the GWOT as catalyst to speed the transformational process. ¹⁹¹

Linking the wartime conditions with the modularization effort reveals a number of factors that may explain why the Army may have initiated the focus on its own. First, one of the DoD's transformation imperatives was explicitly linked to technological advance. Yet, the Army's decision to modularize the force was not hinged on technology as the BCTs would simply be reorganized around the combat platforms from

¹⁹⁰ Army Transformation: Hearing Before the Committee on Armed Services, United States House of Representatives, 108th Cong. 15 (2004) (statement of General Peter J. Schoomaker, U.S. Army Chief of Staff).

¹⁹¹ Ibid., 87–88.

¹⁹²The Director of Force Transformation, Office of the Secretary of Defense *Military Transformation:* A Strategic Approach, 14.

which they were originally designed to fight from.¹⁹³ While the modular BCTs would eventually benefit from increased information technologies resulting from Force XXI initiatives (chiefly the ability of tactical units to communicate via the tactical internet through blue force tracking systems) the Army would be able to quickly transform from the old brigade construct to the new modular BCT design as part of reset activities for units returning from deployments to Iraq and Afghanistan.¹⁹⁴ Thus the Army was able to conduct its priority transformation effort while maintaining combat power in its operational theaters.

The modularization effort also provided the Army with a force structure that would benefit from the standardization of three distinct types of BCTs (heavy, infantry, and Stryker). As discussed earlier, the inclusion of elements formally found at the division and corps levels into the BCT could improve deployability and expeditionary capabilities. Perhaps more importantly for Schoomaker and the Army in 2003 was that modularization would seemingly grow the Army's pool of available combat forces with a relatively small increase in service end strength. As *the 2004 Army Posture Statement* noted, deployments to Afghanistan and Iraq were causing existing stressors to be of a greater concern even though the Iraqi campaign had been underway for a little more than a year. ¹⁹⁵ Considering that the Army expected a future of foreseeable conflict, modularization could reduce stress on the force by building a sustainable rotational schedule for deployments with the additional brigades that modularization would produce. ¹⁹⁶

The evidence that points toward change from within the Army as the primary factor behind the Army's decision to focus its transformation effort on modularity is based largely on the chronology of the decision in light of the indications that the security

¹⁹³ Army Transformation: Hearing Before the Committee on Armed Services, United States House of Representatives, 108th Cong. 29 (2004) (statement of General Peter J. Schoomaker, U.S. Army Chief of Staff).

¹⁹⁴ Department of the Army, 2004 Army Transformation Roadmap, viii; Army Transformation: Hearing Before the Committee on Armed Services, United States House of Representatives, 108th Cong. (2004) (statement of General Peter J. Schoomaker, U.S. Army Chief of Staff).

¹⁹⁵ Department of the Army, 2004 Army Posture Statement, 3.

¹⁹⁶ Ibid.: Department of the Army, 2004 Army Transformation Roadmap, 1–1.

environment and civilian intervention were also likely causal factors. The Army's prior transformational endeavors made the option of modularization feasible for Shinseki, yet no such decision was made before Schoomaker's appointment as Army Chief of Staff. While Schoomaker benefited from prior efforts, he did ultimately decide to focus transformation on modularity. However, the benefits of modularization can be seen as a solution for a growing problem associated with an open-ended war that was taxing the Army's conventional combat forces. While it is possible that the Army's decision to focus transformation efforts on modularization was a result of change from within, if it did, it was likely doing so with the understanding of security environment's impact and the clear indications that America's civilian leaders were demanding change.

D. CONCLUSION

This chapter sought to examine the Army's decision to focus its transformation efforts on the modular BCT concept through three hypotheses. The first hypothesis argued that the decision was based upon a changed or changing security environment or to changes in the Army's roles and missions. The second hypothesis suggested that the decision was forced upon the Army by its civilian leadership. The third hypothesis was rooted in the belief that the Army's decision was the result of change from within through innovative thinking and leadership. While each hypothesis uncovered evidence that can explain the Army's decision, they do so with varying degrees of strength.

The hypothesis with the strongest case is the second, which advocates that civilian intervention was the causal force behind the Army's transformational focus on modularity. The 2001 QDR, DoD transformation documents, and the three national strategies developed by the Bush Administration and Secretary Rumsfeld in the Pentagon demonstrate that military transformation was being driven in a top-down approach. However, it is clear that the reason for doing so was closely linked to the security environment. As such, the first hypothesis that argues that the changed or changing security environment and by extension, the Army's changed roles and missions, makes the second strongest case. The third hypothesis suggesting that the Army's decision was rooted from within through innovative leadership and thinking makes the weakest case.

While the timing of the decision offered scant evidence that General Schoomaker could have been the driving force, the significance that the Army placed upon the security environment within its own transformation documents indicates that other factors were likely driving the decision.

While the evidence suggests that civilian intervention had the greatest impact on the Army's decision to focus transformation efforts on the modular BCT, and the impact of the security environment is a close second, it is difficult to separate the two hypotheses due to their connected nature. There are clear indications that civilian leaders made military transformation a high priority, and as such, the Army's decision to modularize can be seen as a response to satisfy its higher authorities. However, much of the rationale regarding the impetus to change was rooted in a changed or changing security environment. The most complete answer may be found in the combination of the two hypotheses. The combination thus suggests that the Army's decision was both a response to its civilian leaders that desired change, and to the changed security environment that was influencing both the civilian leaders and the Army.

V. CONCLUSION

Beginning with General Eric Shinseki's announcement in 1999, the Army pursued a transformation effort that would span over a decade. Shinseki's vision sought to change the Army for the future through an approach centered on three distinct paths. The service was to retain much of its conventional fighting forces that were designated as legacy units. Looking toward the future, the Army began to experiment with force design and technological solutions for the objective force. To bridge the gap between the legacy and objective forces, Shinseki's vision created the interim brigade combat team (redesignated the SBCT). Upon Shinseki's retirement, and the appointment of his successor, General Peter Schoomaker, the focus of transformation shifted. While the pursuit of the objective force (re-designated the future force by Schoomaker) would remain, the Army would designate the modularization of its conventional forces as its decisive transformational effort. By reallocating force structure elements formally found at the division and corps level to the modular BCT, the Army shifted focus from the division to the brigade.

By 2010, a number of transformation milestones had occurred. First, the SBCT concept had been fully developed, implemented, and deployed to Iraq and Afghanistan a number of times. Second, the modularization process had been completed, and in the process the Army gained twelve BCTs. Third, the future combat system (FCS) program was cancelled. Since the FCS was to provide the combat platforms that the future force would operate from, its cancellation signaled the end of the Army's transformational efforts toward the future force. While the goal of Army transformation in relation to the service's force structure sought to build the future force, even with a budget of \$160 billion, the future force would not come to fruition. ¹⁹⁷ What was left, however, was an Army that would operate through the modular force concept, where the BCT (infantry, heavy, and Stryker) became the primary conventional force building block.

¹⁹⁷ Greg Grant, "It's Official: FCS Cancelled," *DoD Buzz*, June 23, 2009 http://www.dodbuzz.com/2009/06/23/its-official-fcs-cancelled/.

This thesis sought to determine the driving factors behind the Army's decisions that resulted first, in the creation of the SBCT, and later, in the transformational focus to the modular BCT. To do so, these two decisions were examined through three hypotheses that were based on military innovation theories put forth by Stephen Peter Rosen, Deborah Avant, Barry Posen, and others. The first hypothesis contended that either decision could have been the response to a changed or changing security environment or to changes to the Army's roles and missions. The second hypothesis argued that the Army may have acted because it was forced to by its civilian leaders. The final hypothesis suggested that the creation of the SBCT or the focus on modularization resulted from innovative thinking or leadership that originated from the Army's top uniformed or civilian leaders.

A. FINDINGS

As the two case studies that examined the creation of the SBCT and the modular BCT demonstrated, there was evidence that elements of each hypothesis were present in both decisions. In the case studied in Chapter III regarding the SBCTs creation, causal responsibility was most strongly associated with the changed and changing security environment and in the Army's changed or changing roles and missions. There was also evidence of a great deal of innovative thinking and strong leadership from the Army's senior uniformed leader, General Shinseki. Additionally, there was evidence that suggested some civilian intervention, but to a lesser extent than the other possible explanations. In the case of the Army's change in transformation focus to the modular concept, it appeared that civilian intervention was the driving factor behind the decision. However, since the security environment was mentioned as a catalyst for change by the very civilians demanding transformation, by Army in its own publications, this explanation is nearly as strong. Finally, while there was limited evidence that pointed to change originating from the Army's senior leaders, this hypothesis appeared weaker than the others in comparison.

When looking at the time period that covered both the creation of the SBCT and the modular force, the common theme running through both decisions was that a strong case for causal responsibility could be made for the changed or changing security environment and/or changed or changing roles and mission. This finding is constant with Deborah Avant's international theory that asserts that military innovation should occur as a reaction to external dangers associated with the security environment. However, in both cases, a second hypothesis was also closely associated with the decision under examination. In regards to the creation to the SBCT, strong evidence of change from within appeared in a manner constant with Stephen Peter Rosen's claim that "peacetime military innovation occurs when respected senior military officers formulate a strategy for innovation." In the case of modularization, there were indications that civilian intervention was the main driver of change as Barry Posen suggests will happen when war is likely or underway. However, because each of three hypothesis was found as the most or the second most likely causal factor regarding change in either of the two decisions, it is apparent that no one single element was likely responsible to cause the Army to change as significantly as it did.

This thesis was undertaken to investigate Army transformation in regards to the force structure changes that resulted in the creation of the SBCT and the modular BCT concept, but not to predict the future. However, when looking back at the Army's experience from 1999 through 2005 one indicator for change stands out. That is, the importance of the security environment and by extension the Army's roles and missions within it, as a catalyst for change. Therefore, as the security environment changes, and as the Army adjusts its roles and missions as operations in Afghanistan likely come to an end, it is likely that the force structure changes will occur as well in the not too distant future.

¹⁹⁸ Avant, *Political Institutions and Military Change*, 2.

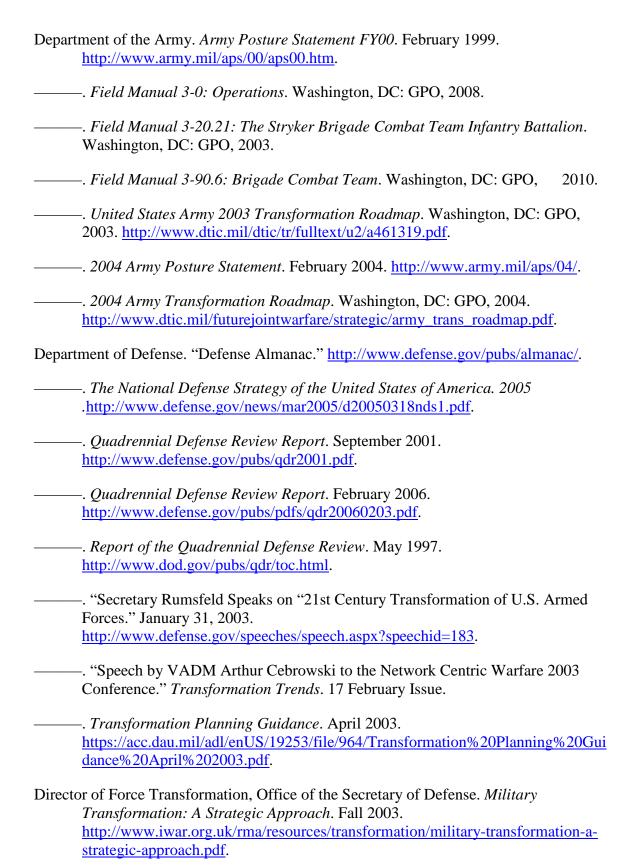
¹⁹⁹ Rosen, Winning the Next War, 21.

²⁰⁰ Posen, *The Sources of Military Doctrine*, 74–75.

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LIST OF REFERENCES

- Adams, Thomas K. *The Army After Next: The First Postindustrial Army*. Westport: Praeger, 2006.
- "Army Transformation Begins Its Second Year." *Army Magazine*, December 2000, http://www3.ausa.org/webint/DeptArmyMagazine.nsf/byid/CCRN-6CCRV7.
- Army Transformation: Hearing Before the Airland Subcommittee, Committee on Armed Services, United States Senate. 106th Cong. (1999),. http://www.armed-services.senate.gov/statemnt/2000/000308es.pdf.
- Army Transformation: Hearing Before the Committee on Armed Services, United States House of Representatives. 108th Cong. (2004)
 http://commdocs.house.gov/committees/security/has203000.000/has203000_0f.ht
 m
- Association of the United States Army Institute of Land Warfare. "Quadrennial Defense Review: From 1997 to 2001." *Defense Report*. June 2000, http://www.ausa.org/SiteCollectionDocuments/ILW%20Web-ExclusivePubs/Defense%20Reports/DR00-1.pdf.
- Avant, Deborah D. *Political Institutions and Military Change*. Ithaca: Cornell University Press, 1994.
- Baumgardner, Neil. "Army Pushing for More Brigade Funding." *Defense Daily*, March 14, 2000, http://www.proquest.com.
- Binnendijk, Hans, "Introduction." *In Transforming America's Military*, edited by Hans Binnendijk, xvii-xxxi. Washington DC: National Defense University Press, 2002. http://www.au.af.mil/au/awc/awcgate/ndu/tam/01_toc.htm.
- Chairman of the Joint Chiefs of Staff (CJCS). *Joint Vision 2010*. Washington, DC: GPO, July 1996.
- . *The National Military Strategy of the United States of America*. 2004. http://www.defense.gov/news/Mar2005/d20050318nms.pdf.
- Charlston, Jeffery A. *Department of the Army Historical Summary FY 1999*. Washington, DC: United States Army Center of Military History, 2006. http://www.history.army.mil/html/books/DAHSUM/1999/index.html.
- Clark, Colin, and George Seffers. "Hamre to U.S. Army: Rethink Future War Strategy." *Defense News*, September 6, 1999, 6.



- Donnelly, William M. Transforming an Army at War: Designing the Modular Force, 1991-2005. Washington, DC: United States Army Center of Military History, 2007.
- Fiscal Year 2001 Budget and Posture of the United States Army: Hearing Before the Committee on Armed Services, United States Senate. 106th Cong. 2000. http://www.armed-services.senate.gov/statemnt/2000/000301es.pdf.
- Fiscal Year 2001 National Defense Authorization Budget Request: Hearing Before the Committee on Armed Services, United States House of Representatives. 106th Cong. 2000.

 http://lobby.la.psu.edu/016 Funding for CH47/Congressional Hearings/Testimo ny/H Armed Services Caldera et al 032200.htm.
- Flournoy, Michele A. "Forward." in *QDR 2001: Strategy-Driven Choices for America's Security*, edited by Michele A. Flournoy, xi-xii. Washington, DC: National Defense University Press, 2001. http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA430963.
- Freedberg, Sydney. "The New Model Army." *National Journal*, August 3, 2000, 1750-1756. http://www.proquest.com.
- Gilmore, Gerry J. "Army to Develop Future Force Now, says Shinseki." *Army News Service*, October 13, 1999. http://www.fas.org/man/dod101/army/unit/docs/a19991013shinvis.htm.
- Goedkoop, Thomas R., and Barry E. Venable. "Task Force XXI: An Overview." *Military Review* 77, no. 2 (Mar/Apr 1997): 68-78.
- Grant, Greg. "It's Official: FCS Cancelled." *DoD Buzz*. June 23, 2009. http://www.dodbuzz.com/2009/06/23/its-official-fcs-cancelled/.
- Hawkins, Glen R., and James Jay Carafano, Prelude to Army XXI: U.S. Army Division Design Initiatives and Experiments 1917-1995. Washington, DC: United States Army Center of Military History, 1997. http://www.fas.org/man/dod-101/army/unit/docs/xxi/toc.htm.
- Jablonsky, David. "Army Transformation: A Tale of Two Doctrines." *Parameters* (Autumn 2001). http://www.carlisle.army.mil/usawc/parameters/articles/01autumn/jablonsk.htm.
- Jaffe, Greg. "Army Scrambles for Funds as it Pursues Modernization." *Wall Street Journal*. April 18, 2000, A20.
- Johnson, Stuart E., John Peters, Karin E. Kitchens, Aaron Martin, and Jordan Fischbach. A Review of the Army's Modular Force Structure. Santa Monica: RAND, 2012. http://www.rand.org/pubs/technical_reports/TR927-2.html.

- Kennedy, Harold. "Army's New Combat Vehicle to Undergo Additional Tests." *National Defense*, December 2000, 35-36. http://www.proquest.com.
- Kugler, Richard L. "Case Study in Army Transformation: Creating Modular Forces."

 Case Studies in National Security Transformation. Center for Technology and National Security Policy, 2008.

 http://www.ndu.edu/CTNSP/docUploaded/Case%2014%20Army%20Transformation%2 OCreating%20Modular%20Forces.pdf.
- Liermann, Christopher R. "Restructuring the Division Support Command." Army Logistics University.

 http://www.almc.army.mil/alog/issues/MayJun03/MS862.htm.
- Linn, Brian McAllister. *The Echo of Battle: The Army's Way of War*. Cambridge: Harvard University Press, 2007.
- Matsumura, John, Randall Steeb, Thomas Herbert, Scot Eisenhard, John Gordon, Mark Lees, and Gail Halverson. *The Army After Next: Exploring Concepts and Technologies for the Light Battle Force*. Santa Monica: RAND, 1999. http://www.rand.org/pubs/documented_briefings/DB258.html.
- Murray, Williamson and Allen R. Millet. "Introduction." In *Military Innovation in the Interwar Period*, edited by Williamson Murray and Allan R. Millett, 1-5. Cambridge: Cambridge University Press, 2006.
- Murray, Williamson. "Innovation: Past and Future." In *Military Innovation in the Interwar Period*, edited by Williamson Murray and Allan R. Millett, 300-328. Cambridge: Cambridge University Press, 2006.
- Nardulli, Bruce R., and Thomas L. McNaughter. "The Army Toward the Objective Force." In *Transforming America's Military*, edited by Hans Binnendijk, 101-128. Washington, DC: National Defense University Press, 2002. http://www.au.af.mil/au/awc/awcgate/ndu/tam/01_toc.htm.
- Nardulli, Bruce R., Walter J. Perry, Bruce Pirnie, John Gordon IV, and John G. McGinn. Disjointed War: Military Operations in Kosovo, 1999. Santa Monica: RAND, 2002.

 http://www.rand.org/content/dam/rand/pubs/monograph_reports/2007/MR1406.p
 df.
- National Defense Panel. *Transforming Defense: National Security in the 21st Century*. December 1999. http://www.dod.gov/pubs/foi/administration_and_Management/other/902.pdf
- O'Reilly, Victor. "Stryker Brigade Versus The Reality of War." *Defense and the National Interest.* 2003. http://www.dnipogo.org/fcs/pdf/stryker reality of war.pdf.

- Phillips, R. Cody. *Operation Joint Guardian: The U.S. Army in Kosovo*. Washington, DC: United States Army Center of Military History, 2007. http://www.history.army.mil/brochures/Kosovo/Kosovo.pdf.
- Posen, Barry R. *The Sources of Military Doctrine: France, Britain, and Germany Between the World Wars.* Ithaca: Cornell University Press, 1984.
- The Posture of the United States Army: Hearing Before the Committee on Armed Services, United States House of Senate. 108th Cong. 2003. http://www.armedservices.senate.gov/statemnt/2003/February/Shinseki.pdf.
- Public Broadcasting Service. *The Future of War*. "Interview: General Eric K. Shinseki." http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/shinseki.html.
- Public Broadcasting Service. *The Future of War*. "Interview: Major General James Dubik."

 http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/dubik.html.
- Reardon, Mark J., and Jeffery A. Charlston. *From Transformation to Combat: The First Stryker Brigade at War*. Washington, DC: United States Army Center of Military History, 2007.
- Reimer, Dennis J. "The Army After Next: Knowledge, Speed and Power." *Military Review* 79, no. 2 (May/June 1999): 2–7.
- Rosen, Stephen Peter. Winning the Next War. Ithaca: Cornell University Press, 1991.
- Rumsfeld, Donald. Known and Unknown: A Memoir. New York: Penguin, 2011.
- Russell, James A. *Innovation, Transformation, and War: Counterinsurgency Operations in Anbar and Ninewa Provinces, Iraq, 2005-2007.* Stanford: Stanford University Press, 2011.
- Serena, Chad C. *A Revolution in Military Adaptation: The U..S Army in the Iraq War.* Washington, DC: Georgetown University Press, 2011.
- Status of Forces: Hearing Before the Committee on Armed Services, United States Senate.106th Cong. 1999. http://www.armedservices.senate.gov/statemnt/1999/991026es.pdf.
- Steele, Dennis. "Realizing the Army Vision." *Army*, December 2002, 47–52. http://www.proquest.com.
- U.S. Army Training and Doctrine Command. *Army Guide to Modularity Version 1.0*. Fort Monroe: GPO, 2004.

- U.S. General Accounting Office. *Military Transformation: Army's Evaluation of Stryker* and M-113A3 Infantry Carrier Vehicles Provided Sufficient Data for Statutorily Mandated Comparison. Washington, DC: GPO, 2003.
- U.S. Government Accountability Office. *Military Transformation: Fielding of Army's Stryker Vehicles Is Well Under Way, but Expectations for Their Transportability by C-130 Aircraft Need to Be Clarified.* Washington, DC: GPO, 2004.
- Vick, Alan, David Orletsky, Bruce Pirnie, and Seth Jones. *The Stryker Brigade Combat Team :Rethinking Strategic Responsiveness and Assessing Deployment Options*. Santa Monica: RAND, 2002. http://www.rand.org/content/dam/rand/pubs/monograph_reports/2005/MR1606.pg http://www.rand.org/content/dam/rand/pubs/monograph_reports/2005/MR1606.pg
- White House. *The National Security Strategy of the United States of America*. Washington, DC: White House, 2002. http://georgewbush-whitehouse.archives.gov/nsc/nss/2002/.
- ------. "President Speaks on War Effort to Citadel Cadets." December 11, 2001. http://georgewbush-whitehouse.archives.gov/news/releases/2001/12/20011211-6.html.
- Yarrison, James L. *The Modern Louisiana Maneuvers*. Washington, DC: United States Army Center of Military History, 1999.

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