Organizational Change: An Examination of the Past to Prepare for the Future

A Monograph

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Leaders within the US Army regularly discuss change and attempt to execute organizational change but with unpredictable results. Unfortunately, there is limited information within US Army doctrine to described how leaders should plan and execute organizational change. The doctrine suggests that leaders should use a closed system sequential process like John Kotter's 8-Step Change Model. The problem with this approach is that organizations are open systems that rely on continuous interaction with the external environment to survive. A closed system approach fails to take into consideration the numerous variables that could influence the change process.

This monograph proposes that the US Army update their doctrine and education to include open systems theory when presenting organizational change. The revision will enhance the cognitive abilities of the Army's organizational leaders and better prepare them to plan and execute change initiatives.

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Abstract

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Leaders within the US Army regularly discuss change and attempt to execute organizational change but with unpredictable results. Unfortunately, there is limited information within US Army doctrine to described how leaders should plan and execute organizational change. The doctrine suggests that leaders should use a closed system sequential process like John Kotter's 8-Step Change Model. The problem with this approach is that organizations are open systems that rely on continuous interaction with the external environment to survive. A closed system approach fails to take into consideration the numerous variables that could influence the change process.

This monograph begins by examining the shortcomings with the US Army's doctrine and education on organizational change. These shortcomings then justify evaluating the need to consider other organizational change theories. The Burke-Litwin Model of Organization Performance and Change is a proven open system theory that leaders use to evaluate and implement revolutionary large system change. The Burke-Litwin model then serves as the framework to assess the US Army's successful organizational change after the Vietnam War to AirLand Battle. The case study demonstrates that large scale revolutionary change requires audacious leaders who develop and adapt the organization's mission and culture based on the continuous interaction with the external environment.

Organizational change is inherently a complex process that requires more than a checklist to successfully complete. This monograph proposes that the US Army update their doctrine and education to include open systems theory when presenting organizational change. The revision will enhance the cognitive abilities of the Army's organizational leaders and better prepare them to plan and execute change initiatives.

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Abbreviations

ADP	Army Doctrine Publication
ATP	Army Technical Publication
FM	Field Manual
FORSCOM	US Army Forces Command
TRADOC	US Army Training and Doctrine Command
USSR	Union of Soviet Socialist Republics

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Introduction

Organizational leaders in the US Army regularly attempt to execute change within their organizations but have varying degrees of success. Moreover, Army doctrine contains limited information on the process required to implement organizational change. In the Command and General Staff Officers Course, the preparatory training for the US Army's mid-grade organizational leaders, students receive a single lesson on John Kotter's 8-Step Change Model[1]. At the US Army War College, the Army's future strategic leaders regularly read John Kotter's book *Leading Change*, which details Kotter's 8-Step Change Model.[2] Despite being popular and sometimes useful, Kotter based his model on his personal experience and knowledge rather than empirical research. There is no bibliography or references in the back of his book.[3] His model lacks independent verification and validation and there is skepticism on the adaptability of the model to a variety of circumstances.[4] This is especially concerning in terms of leading change for the hierarchical structure and sometimes bureaucratic processes within the US Army.

Since 2001 the US Army has primarily focused on training and fighting a counterinsurgency style of limited warfare in initially Afghanistan and then Iraq. Due to a myriad of reasons, starting in 2017, the US Army changed its mission and strategy to prepare to fight large scale combat operations and defeat an enemy with similar or greater capabilities.[5] This ongoing change is comparable to the organizational change the US Army completed following

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[1] US Army Command and General Staff College, US Army Command and General Staff Officer Course Common Core, L105: Leading Organizations in Change Advance Sheet, August 2019, 3.

[2] Thomas P. Galvin and Lance D. Clark. "Beyond Kotter's Leading Change: A Broad Perspective on Organizational Change for Senior US Military Leaders." US Army War College, July 16, 2015, accessed September 3, 2019, https://apps.dtic.mil/dtic/tr/fulltext/u2/1001714.pdf, 1.

[3] John P. Kotter, *Leading Change* (Boston, Mass: Harvard Business Review Press, 2012), 187.

[4] W. Warner Burke, *Organization Change: Theory and Practice, Fifth edition*. (Los Angeles: SAGE, 2018), 4.

[5] US Department of the Army, Field Manual (FM) 3-0, *Operations* (Washington, DC: Government Printing Office, 2017), 1-2 – 1-3.

the Vietnam War. In 1973, the US Army departed Vietnam after fighting for multiple years a counterinsurgency style of warfare. Due to the external environment, the US Army was required to change its mission and strategy to prepare to fight against the formidable Union of Soviet Socialist Republics (USSR). This change by the Army continued through the next two decades and culminated with a victory in Operation Desert Storm in 1991. That victory against the formidable Iraqi Army demonstrated that the US Army successfully changed and could fight and win in a large-scale combat against a threat with similar capacities.

When discussing change, it is essential to consider that there are varying degrees of change and whether the change is planned or unplanned. Most change is minimal, creates some improvement, and generally impacts a limited section of an organization. This type of change is evolutionary change. In contrast, revolutionary change completely turns the organization in a new direction and vision for the future. Revolutionary change provides the organization with a completely new mission accomplished with a shift in strategy, leadership, and culture. In addition to considering the amount an organization changes, it is also essential to determine if the change is planned or unplanned. The unplanned change will generally lead to gradual change within the organization. More often planned change is how revolutionary change can occur. For most organizations, the change that occurs regularly is unplanned and evolutionary. While planned revolutionary change does not happen frequently, when it does occur, it will garner significant attention. This study will focus on planned revolutionary change within the US Army.[6]

For a planned change, the leader of the change usually develops a linear process to guide the organization through the change. For example, Step 1 or Phase 1 then Step or Phase 2, 3, 4, and this continues until the change is complete. This process may be like Kotter's eight-stage

[6] Burke, *Organization Change,* 1.

change process, which is also a linear process.[7] However, when change occurs, it is often anything but linear. Numerous unforeseen factors impeded the process, and the organizations may seem to move forward, and then move backward. This forward and backward movement may also lead to the change initiative moving in a completely different direction. There could be internal and external tension and resistance to the change initiative. Over time, the audacity of the leader to follow the prescribed change process may overall present a linear process. Yet, through the change, there is an acceptance of potential chaos, and the change does not happen in the prescribed sequential pattern. The disorder creates a paradox identified by Dr. W. Warner Burke. "We must plan change, yet understand that things never turn out quite as we planned."[8] Within the US Army, leaders summarize this idea by the saying that no plan survives first contact with the enemy. This paradox creates a challenge when leading the change because unforeseen circumstances require a leader to adapt the plan for the change. Thus, instead of using a linear model, another tool for planning organizational change is a non-linear model that uses open system theory. The Burke-Litwin Causal Model of Organizational Performance and Change is a non-linear model that uses open system theory to provide a way to plan and execute organizational change. The Burke-Litwin Model will provide the means to examine the case study of revolutionary change in the US Army following Vietnam.

In considering revolutionary change, there was a once heavily cited statistic that 70% of change efforts fail. While this statistic produced a great deal of discourse, there is no empirical evidence to support this statistic.[9] Nonetheless, despite the ambiguity for the specific success rate of revolutionary change, there is agreement that executing change is challenging and requires significant effort. Yet, despite the numerous challenges associated with change, this paper will present an example of a successful revolutionary change that impacted the entire US Army

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[7] Kotter, *Leading Change*, 21.

[8] Burke, *Organization Change*, 10-12.

[9] Nick Tasler, "Organizational Change Is Hard." *Harvard Business Review*, July 19, 2017, 2-3.

following Vietnam. This successful revolutionary planned change occurred when the Army's overall framework changed to Active Defense and then to AirLand Battle. The US Army was able to assess the effectiveness of this change in 1991 during the Desert Storm War against the Iraqi Army.

When the US Army departed Vietnam in 1973, the American public had little trust in the Army, and many Americans blamed the military for outcomes of the Vietnam War. Internal to the Army, there was indiscipline, drugs, and racial challenges. Morale was low, there was poor leadership, and the formations were ineffective. [10] At the international level, the Communist Soviet Union remained a threat to the United States. The Arab-Israeli War in 1973 demonstrated that the US Army needed to be prepared to fight a formidable and well-equipped enemy that could employ effective and lethal weapon systems. [11] Two transformational leaders, General William E. DePuy and General Donn A. Starry, recognized these challenges and the need for change. Both leaders planned and then implemented large-scale revolutionary change. Army Doctrine was a primary means to communicate and execute that change. The Army published Field Manual (FM) 100-5, *Operations,* in 1976, and introduced the doctrinal framework of Active Defense. Then in 1982, the Army completed the revolutionary change and implemented a new doctrinal framework known as of AirLand Battle. In addition to the changes in doctrine there were substantial changes in the Army's equipment, training, and structure to improve the overall performance. The Army continued to enhance the change during simulated combat scenarios and then proved the success of the change in actual combat during the Desert Storm War.

Research Questions

With the Burke-Litwin Model as the method to evaluate change and a case study of the US Army's successful transition to AirLand Battle, this paper will answer a series of research

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[10] Richard W. Stewart. *American Military History Volume II, The United States Army in a Global Era, 1917-2008 Second Edition*, (Washington, DC: Center of Military History US Army, 2010), 371.

[11] Ibid., 382.

questions. The first question considers how Army leaders successfully executed the change following the Vietnam War. The next question explains why the change endured and succeeded despite the dynamic external environment, which included several Presidential administrations. The final question evaluates how successes in past organizational change initiatives are applicable when considering future change within the Army. Specifically, answering what lessons from the transition to AirLand Battle are relevant as the US Army currently transitions from operations in Iraq and Afghanistan to achieve Multi-Domain Operations' capabilities.

The outline to answer these questions begins with a review of the doctrine and literature on organizational change. The next two sections provide an extensive analysis of organizational change theories and a detailed examination into the case study, the US Army's revolutionary organizational change to AirLand Battle. With an understanding of the organizational change theories and the case study, the analysis section presents the answers to the research questions. In the conclusion section, the answers to research questions suggest that the Army should consider revising the doctrine on organizational change and modify how it educates organizational leaders to think about change. This paper proposes that instead of using a closed linear model to depict a change, the US Army should use an open system theory to plan and execute organizational change like the Burke-Litwin Causal Model of Organizational Performance and Change. Without a comprehensive doctrinal foundation, an Army leader's ability to successfully implement organizational change will differ. With the Army in the beginning stages of the transition to Multi-Domain Operations, a leader's better understanding of organizational change could improve the Army's overall performance at a quicker pace. The pace and effectiveness of the change are particularly relevant because the Army does not control the time or place of the next potential engagement with an enemy that has similar capabilities to the US Army.

Doctrine and Literature Review

The Doctrine and Literature Review section presents the US Army's doctrine on organizational change and an overview of the institutional education the Army provides to organizational and strategic leaders on leading change. Also included in this section is an explanation of Kotter's 8 Step change model and an introduction to Dr. W. Warner Burke's model for organizational change. This section reveals the gaps within the US Army's current doctrine and education on organizational change and this then sets the conditions to investigate other organizational change models in the subsequent sections of the paper.

US Army doctrine contains limited information about how to thoroughly plan and execute organizational change. The primary Army source to consult when considering change is *Army Doctrine Publication (ADP) 6-22, Army Leadership and the Profession*. This reference acknowledges the direct, organizational, and strategic levels of leadership and that there are leader attributes and competencies at each level. Specifically, the doctrine recognizes the role of organizational leaders in leading change.

> The Army's organizational leaders play a critical part in maintaining focus on fighting the enemy and not the plan. They are at the forefront of adapting to operational environment changes and exploiting emerging opportunities by applying a combination of intuition, analytical problem solving, systems integration, and leadership by example—as close to the action as feasible.[12]

These statements identify that a plan will change based on the activity from the enemy or environment and that a leader should prepare to innovate and adapt to take advantage of new opportunities. Next, the doctrine presents how a leader should lead through the change. "Organizational leaders prioritize what changes their organization will pursue and guide their

[12] US Department of the Army. Army Doctrine Publications (ADP) 6-22, *Army Leadership and the Profession*. (Washington DC: Government Printing Office, 2019), 9-2.

organizations through several steps to ensure their initiatives for change last."[13] ADP 6-22 then provides a list of the steps to lead change:

- Assess the need for change (anticipate problems or identify opportunities).
- Build a guiding coalition.
- Create and communicate a compelling vision.
- Determine how to implement vision (design plan, gather resources).
- Empower others to act.
- Facilitate learning (promote new skill development).
- Goal reinforcement (identify and reinforce evidence of progress).
- Hone the change process through monitoring and reinvesting.
- Institutionalize change (modify policies or procedures).[14]

Unfortunately, a list contradicts the initial statement that a leader will have to adjust the plan based on the environment or the enemy. Rationally, a list of steps implies that the process is linear and sequential, in which one step leads to the next level. This list to lead change does not take into consideration the external environment of the organization, which can include factors like the enemy, resources, or input from superiors. These factors can negatively impact the change process at any step and then require a leader to adapt from the original plan. However, the doctrine does not address if or how a leader should adapt to these factors. Instead, a leader must rely on other sources or experiences to assist in guiding the change initiative.

An experience that many Army organizational leaders depend on to determine their actions is the education they received during the Command and General Staff College Officer's Course. This course uses a master's level curriculum to "educate field grade officers to be officers to be agile, innovative, and adaptive leaders within increasingly complex and uncertain environments."[15] The field grade officers are the US Army's mid-grade officers who serve as organizational leaders. As part of the curriculum, the field grade officers take two classes on leadership, L100 Developing Organizations and Leaders and L400 Art of Command. Between

[13] US Army, ADP 6-22, 9-2.

[14] Ibid., 9-2.

[15] "Command and General Staff School," US Army Combined Arms Center, last modified March 21, 2016, accessed December 4, 2019, https://usacac.army.mil/organizations/cace/cgsc/cgss.

the two courses, the students spend twenty-six hours in the classroom discussing the numerous facets of organizational leadership. Within the twenty-six hours, professors dedicate only two hours in class discussion on change management within organizations. For this single class, the preparatory readings include two case studies and a synopsis article on Kotter's *Leading Change*.[16] The article states, "The Kotter model provides military leaders a straightforward, logical, sequential, and effective model for leading organizational change." The article goes on to suggest that part of the attractiveness of Kotter's Model is the simplicity and straightforwardness in which each stage of the model builds upon the previous step.[17] The sequential process leads to a closed linear approach for organizational change in which there are no additional inputs into the process. The article contends that despite circumstances, organizational leaders must not skip a stage in Kotter's Change Model or execute the stages out of sequence.[18] This closed system approach to planning and implementing change is counter to the expectations of organizational leaders described in ADP 6-22. Organizational leaders should be at the "forefront of adapting to operational environment changes and exploiting emerging opportunities by apply a combination of intuition, analytical problem solving, systems integration, and leadership by example."[19] This tension between the expectations for US Army's organizational leaders and the gap in their education creates an opportunity to consider other organizational change theories.

Before exploring other organizational theories, it is necessary to further examine John P. Kotter's Eight Stage Change Model from his book *Leading Change*. The stages are the following:

1. Establishing a sense of urgency

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[16] "L105 Advance Sheet," (L100: Developing Organizations and Leaders, Command and General Staff Officer Course, Fort Leavenworth, KS, 2019), 2.

[17] Billy Miller and Ken Turner, "Leading Organizational Change: A Leader's Role," (L100: Developing Organizations and Leaders, Command and General Staff Officer Course. Fort Leavenworth, KS, 2019), 1.

[18] Ibid., 7.

[19] US Army, ADP 6-22, 9-2.

2. Creating the guiding coalition
3. Developing a vision and strategy
4. Communicating the change vision
5. Empowering broad-based action
6. Generating short-term wins
7. Consolidating gains and producing more change
8. Anchoring new approaches in the culture.[20]

Kotter further expands on each stage within the book and presents possible techniques to accomplish each stage. He makes it clear, however, that importance of sequence when completing each stage. "Skipping even a single step or getting too far ahead without a solid base almost always creates problems."[21] Kotter further suggests that if leaders failed to follow the sequence prescribed in his model, the organizational change will not create momentum and come across as contrived, forced, or mechanistic.[22] The suggested rigid linear approach to the model could be problematic when the external environment shifts overtime. For example, to create a sense of urgency in the first stage of the model, Kotter suggests that a leader should examine competitive markets or identify potential crises.[23] Competition or crisis could undoubtedly create the necessary sense of urgency within an organization to begin a change as determined in step one. However, a shift in the competition or a crisis in the later stages of the model would be problematic if a leader only executes the stages sequentially. Then at stage eight, the anchoring would be based on a condition that has shifted since beginning at organizational change at step one. Kotter acknowledges the value of an adaptable organization but does not provide any considerations for adaptation once a leader has already started the organizational change initiative using the sequential model.[24] Kotter's Change Model appears to be a useful and straightforward tool, but only within a closed system in which the input is only provided at stage one. If there are

[20] Kotter, *Leading Change*, 21.

[21] Ibid., 23.

[22] Ibid., 24.

[23] Ibid., 21.

[24] Ibid., 170.

additional inputs after beginning, then the process must potentially start over again. Thus, an open system model would be a better model for organizational change.

The US Army War College also identified insufficiencies with Kotter's *Leading Change*. The War College is a graduate-level academic institution that "educates and develops leaders for service at the strategic level while advancing knowledge in the global application of Landpower."[25] The graduates from the War College are able to serve as leaders at the strategic levels within the US Army and oversee large scale organizational change. Dr. Thomas P. Galvin and Lieutenant Colonel Lance Clark from the War College identified the shortcomings with Kotter's model even though many of their students heavily rely on Kotter's Model to plan change. Galvin and Clark suggest that Army leaders do not operate in the appropriate environment for Kotter's approach to be successful. "The size and complexity of the US military organization and its strong dependence on external stakeholders such as Congress cause leaders to employ strategies and actions that modify or even deviate from Kotter's preferences."[26] Instead, Galvin and Clark presented alternative perspectives to consider when diagnosing and initiating change in the US Army. One of the suggested models presented in their article is The Burke-Litwin Model of Organizational Performance and Change.[27]

Dr. W. Warner Burke is the principal theorist responsible for the creation of the Burke-Litwin Model and has credentials to support his position. He is a social-organizational psychologist with experience in teaching, researching, and consulting. His consulting occurred in the public and private sector with predominate organizations, and he has received numerous prestigious awards for his work. He is also responsible for organizing the one-year fellowship

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[25] "About The US Army War College," US Army War College, accessed December 4, 2019, https://www.armywarcollege.edu/overview.cfm.

[26] Galvin and Clark, "*Beyond Kotter's Leading Change*", 53-54.

[27] Ibid., 23-25.

with the US Army War College for a strategic leader to attend Columbia University.[28] With a respected background, Dr. Burke's book, *Organizational Change Theory and Practice*, is a primary source for researching organizational change. The book contains the current research on theories, models, and perspectives on organizational change to include a detailed evaluation of the Burke-Litwin Model. Burke uses a variety of sources throughout this book and categorizes them into three general groups. The first group of sources is the latest organizational theory literature, which includes many models that link theory with practice. The next collection of references is trade literature, which are professional books written by consultants and knowledgeable practitioners from proven organizations. However, the problem with trade literature is that organizations change, and the past environment will likely not be the same as the current dynamic environment. Burke considers Kotter's *Leading Change* trade literature.[29] The final group of sources is story books that provide a logical and condensed lesson. The challenge with story books is that they tend to over simply the experience they are addressing. Despite the specific categories, Burke acknowledges that some sources may fall into more than one category.[30] With an expansive assortment of sources, *Organizational Change Theory and Practice* provides the necessary foundation to draw out applicable organizational change theories for a US Army case study on revolutionary change.

Organizational Change Theories

As described in the Doctrine and Literature Review section, the US Army tends to rely heavily on Kotter's Change Model when considering organizational change. Thus, this section provides the vital basis of other organizational change theories that are necessary when evaluating a military case study. This lack of knowledge within the US Army could be a potential reason for

[28] Burke, *Organization Change*, 452-454.

[29] Ibid., 3.

[30] Ibid., 2-5.

the failures in planned revolutionary change. As previously presented, there is an unconfirmed statistic about the percentages of failures in large scale change endeavors. While the specific percentage of failures is not relevant, it is essential to acknowledge that large scale fundamental organizational change failure does occur. Burke provides some possible reasons why organizational change does fail. First, he concedes that organizational change is challenging. Second, he identifies that leaders have difficulty making a case for change. Finally, he recognizes that there is limited knowledge about how to plan and accomplish change.[31] This section on Organizational Change Theories provides a foundation to address the lack of knowledge identified in Burke's third reason for failures. The section includes information on open systems theory, the types and levels of change, and the Burke-Litwin Model. This foundational knowledge provides the means to view the case study on the Army's transition to AirLand Battle.

Open Systems Theory

When evaluating change within an organization, an open systems theory provides a better framework to understand the dynamics of the organization than a closed systems approach. This section will define a system and describe the components of an open system theory. Also, this section is a summary of the US Army's doctrine on system thinking and examination on how to view the Army as an open system.

There are numerous definitions of a system, but the descriptions generally acknowledge that a system consists of parts, variables, or components that interact or have a relationship with one another.[32] The critical difference between an open system and a closed system is the interaction with the environment external of the system. In an open system, there is continuous input and output from the system with the external environment. In contrast, in a closed system, there is a potential initial input into and final output from the system, but otherwise, nothing

[31] Burke, *Organization Change*, 10.

[32] Alex J. Ryan, "What is a Systems Approach? "Cornell University Library, accessed February 12, 2019, http://arxiv.org/abs/0809.1698, 1-2.

crosses the boundary of the system. A closed system is like a linear equation. "The assumption of a closed system enables the design of reproducible experiments with predictable outcomes from the same initial conditions."[33] However, this assumption does not apply to an organization that needs the environment to survive. Open systems survive because of their continuous interaction with their environment through a permeable boundary that allows the transfer of energy.

To understand an open system, there should be a boundary to define the system and the environment external to the system. The variables that actors can control are part of the system, and the uncontrollable variables are part of the external environment. The boundary between the system and the environment is "an arbitrary, subjective construct defined by the interest and the level of the ability or authority of the participating actors."[34] Thus, the boundary may change based on a decision from an actor observing the system. Even with an evolving boundary, the flow of energy between the system and the environment must continue for the system to endure.

Open system theory derives from the study of cell biology.[35] Living systems provide the foundational behavioral characteristics of an open system. The biological cell is an open system with a porous boundary, and the cell is dependent on the environment for survival. The cell takes in oxygen or other forms of energy through the porous barrier. The cell then transforms the energy and returns an output into the environment. The cell uses energy to endure and maintain their existence. "At the biological level, living systems achieve this durability through genetic coding (DNA), a blueprint for self-reproduction. Unless their genetic code is altered, living systems go on replicating themselves almost indefinitely."[36] In order words, if left unaltered,

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[33] Ryan, "What is a Systems Approach", 29.

[34] Jamshid Gharajedaghi, *Systems Thinking: Managing Chaos and Complexity: A Platform for Designing Business Architecture*. 3rd ed. (Amsterdam: Morgan Kaufmann, 2011), 30

[35] Burke, *Organization Change*, 5, 54.

[36] Gharajedaghi, *Systems Thinking*, 32.

cells have an internal process to reproduce themselves through continuous interaction with the external environment. This reproduction process occurs due to an open system.

A human organization is an open system that follows a similar pattern of a biological cell and moves toward a predefined order.[37] An organization relies on the continual interaction with its environment to survive. The organization receives energy through a permeable boundary. The energy in a broad sense can include money, raw material, or the work of people. The organization then uses the energy to create a product or service and return an output to the environment.[38] Through this ongoing process, the organization will invariably reproduce the same outputs. The cultural code of the organization, "those hidden assumptions deeply anchored at the very core of our collective memory," will cause the organization to reproduce itself like the DNA in a biological cell.[39] This desire to reproduce similar outputs and survive creates a resistance to change. In an organization, there is a comfort with a familiar process that has resulted in survival and there is a fear of the unknown that occurs during organizational change.

To understand and overcome resistance, open systems theory empowers change agents to focus on the whole system and not just the parts of the organization that are resistant to the change. Unfortunately, there is a tendency to only consider the symptoms and not the source of the resistance within the context of the system.[40] Instead, open system theory allows change leaders to identify all the variables involved with the opposition and understand how the variables interact within the context of the system. This information then will enable leaders to identify and predict confrontation. Jamshid Gharajedaghi, a systems sciences professor, provides a theory to support the whole system approach. "It is then easier to predict the behavior of the parts by

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[37] Gharajedaghi, *Systems Thinking*, 32.

[38] Burke, *Organization Change*, 55.

[39] Gharajedaghi, *Systems Thinking*, 32.

[40] Dietrch Dörner, *The Logic of Failure: Why Things Go Wrong and What We Can Do to Make Them Right* (New York: Metropolitan Books, 1996), 74.

understanding the behavior of the whole than to predict the behavior of the whole by understanding the behavior of the parts."[41] His idea emphasizes that when planning change, a whole systems approach is ideal to identify and overcome potential resistance to organizational change.

In addition to considering the whole system, there should be a concern for how the variables interact and the level of detail to evaluate the interaction of the variables. Like biological cells, organizations have differentiated components that exist to support one another as part of a whole system.[42] When considering the variable interactions, there can be a wide array of responses. The change agent can use these responses to adjust the level of detail in the evaluation of the variables and the system. The process to select the appropriate level of detail is not absolute, and instead is based on interrelations between an identified variable.[43] This change in the level of detail is known as framing and involves viewing variables in a certain way for period of time.[44] Framing is similar to taking a picture and focusing on the variables within the frame of the picture. The frame gives structure and direction when viewing certain variables while potentially deferring variables external to the frame. The challenge for change agents is to adjust the frame properly. A change agent should continuously assess the interactions between variables and the whole system. With this assessment, the agent can then adjust the level of detail in the frame as necessary to advance the change process.

The US Army has doctrine that coincides with open systems theory. Within the manual, ATP 5-0.1, *Army Design Methodology*, there is a section that addresses system thinking. The Army considers system thinking a key concept when executing the conceptual problem-solving

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[41] Gharajedaghi, *Systems Thinking*, 118.

[42] Burke, *Organization Change*, 72.

[43] Dörner, *The Logic of Failure*, 78.

[44] Bryan Lawson, *How Designers Think: The Design Process Demystified. 4th ed*. (Amsterdam: Architectural Press, 2006), 292.

process known as Army Design Methodology. The doctrine defines a system as "a group of interacting, interrelated, and interdependent components or subsystems that form a complex and unified whole."[45] In addition to internal interactions within the system, the Army acknowledges that a system interacts with the surrounding environment and other systems, as shown in Figure 1. The system receives inputs, adapts those inputs to internal logic, and then provides an output to the broader environment.[46] These doctrinal definitions of systems thinking align with the open systems theory for biological cells and human organizations.

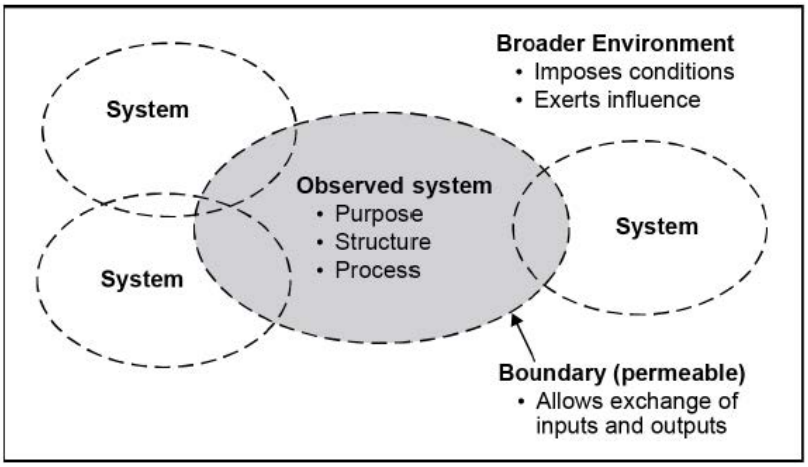

Figure 1. Systems Thinking. US Department of the Army, Army Techniques Publication (ATP) 5-0.1, *Army Design Methodology* (Washington, DC: Government Printing Office, 2015), 1-8.

The Army Doctrine also recognizes the value of systems thinking in a problem-solving process. Systems theory minimizes the linear cause-effect and compartmentalization methods typically used to identify problems and solutions.[47] Leaders that us system thinking can better identify the interactions of the numerous variables and root causes of problems. With this increased understanding, there is an opportunity to develop more effective solutions. There is also an ability to evaluate the interactions of multiple systems and the broader environment. The

[45] US Department of the Army, Army Techniques Publication (ATP) 5-0.1, *Army Design Methodology* (Washington, DC: Government Printing Office, 2015), 1-7.

[46] US Army, ATP 5-0.1, 1-8.

[47] Ibid., 1-8

Army recognizes the value of system thinking in their conceptual problem-solving process of Army Design Methodology. Unfortunately, the Army does not connect system thinking to any of its doctrine on organizational change. As previously described in the literature review section, the Army's organizational change doctrine relies on a linear method that is contrary to the tenets of systems thinking. System thinking is a critical component when planning and executing organizational change.

Going forward, when evaluating organizational change, it is essential to consider the US Army an open system. There is a porous system boundary between the US Army and the external environment. Any variables that the Secretary of the Army or US Army Chief of Staff control are part of the US Army system. Significant systems external to the Army include the Department of Defense, the US Congress, the President of the United States, and other countries. The Army depends on the continual interaction and transfer of energy with the environment to survive. This energy includes finances, material, and people. The Army then uses the energy to provide the service to the external environment. This service primarily includes security for the United States and the ability to win wars as the direction by elected leaders. Recognizing the US Army as an open system will facilitate the understanding of organizational change.

Types and Levels of Organizational Change

The word change occurs regularly during personal and professional conversations. However, depending on who is speaking or listening, the word change has various meanings. This section will present distinctive views when defining change within an organization from the perspective of Dr. Burke. He categorizes the nature of organizational change between evolutionary versus revolutionary change, and he takes into consideration the different levels within an organization where change can occur.

A key aspect to delineated evolutionary versus revolutionary change is magnitude of the change. "Revolutionary change, by definition, can be seen as a jolt (perturbation) to the

system."[48] This jolt or disruption from a revolutionary change will result in an organization that will not be the same. An example of a revolutionary change is an entirely new mission for an organization. The mission provides the overall purpose and goals for the organization. As described in the open system theory section, an organization seeks to survive by making slight improvements to the regularly occurring process inside of the system. However, there may be instances when an organization cannot survive by repeating the same methods, and instead the organization will have to conduct a revolutionary change to survive. For example, if the external environment significantly limits the number of resources available to a system, then the system will have to conduct a revolutionary change to survive. An example in business is when revenue decreases substantially, and the company must perform revolutionary change to remain viable in the marketplace. This notion also applies in the military. When an adversary changes the environment and is on the brink of destroying an army, the army must conduct a revolutionary change to regain the initiative and defeat the adversary. Revolutionary change is drastic and will result in a different organization.

Conversely, evolutionary change is a continuous process and will not result in a completely different organization. Burke declares that 95% of change within an organization is evolutionary change. Leaders within an organization conduct evolutionary change to make continuous improvements. Some examples of evolutionary change within business include changing the way to package a product, instituting a new form of commission on sales, or starting new training classes. Within the Army, new commanders often implement change to improve the organization; however, these changes do not fundamentally transform the formation beyond their intended purpose. Evolutionary changes will enhance the organization and potentially fix some problems but do not entirely redefine the purpose of the organization. Evolutionary change will

[48] Burke, *Organization Change*, 77.

generally leave the organization intact, and the organization will continue to operate following their previously determined mission.[49]

In addition to considering revolutionary verse evolutionary change, Burke identifies the level of change within an organization as another factor. He lists three levels of change, "individual (including interpersonal), group (including intergroup), and the larger system (including interorganizational)."[50] These levels are not rigid boundaries but instead provide a frame to understand change within the organization. The open system theory section acknowledged that multiple variables interact within the organization, and these variables interact across the levels. The levels provide a frame to understand where organizational change begins and then how to lead change at each of the levels. While there are multiple levels, a whole system approach is still the ideal consideration, but the levels provide a structure to reference.[51]

When evaluating the US Army's organizational change following Vietnam to AirLand Battle, this case study will regard the change as a revolutionary large system change. This categorization of revolutionary change means the Army experienced a shock that lead to a redefinition of their purpose to meet the needs of the external environment. For a large system, the change impacted the entire US Army and other organizations outside of the Army. This was such a large-scale change that it took years to implement across the multiple levels within the Army. The Army was then able to validate the success of the change across the various levels against a formidable enemy during the Desert Strom War.

Burke-Litwin Causal Model of Organization Performance and Change

The Burke-Litwin Model of Organization Performance and Change (Figure 2) is an open system model used to evaluate and implement revolutionary large system change. As an open

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[49] Burke, *Organization Change*, 78.

[50] Ibid., 134.

[51] Ibid., 134

system model, there are constant inputs and outputs with the external environment and interactions between the variables within the model. This section will explain the model and divide the components of the model in the categories of transformational and transactional factors. The transformational factors of the model then serve as a framework to evaluate the revolutionary change that occurred during the transition to AirLand Battle.

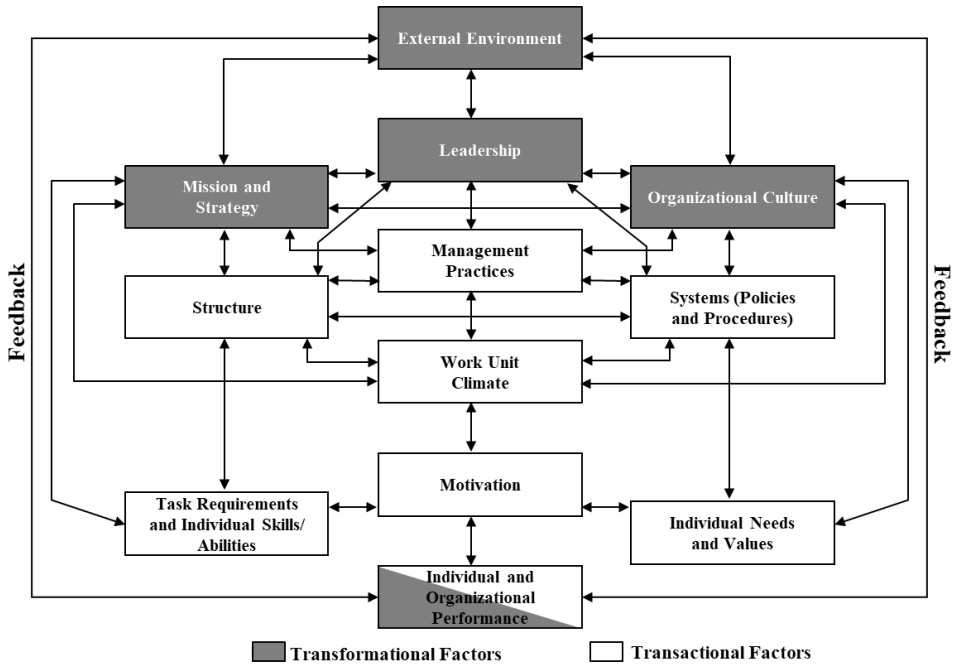

Figure 2. Burke-Litwin Causal Model of Organizational Performance and Change. Created by author from W. Warner Burke, *Organization Change: Theory and Practice*, Fifth edition. (Los Angeles: SAGE, 2018), 227.

The Burke-Litwin Model consists of twelve boxes and each box contains a factor that provides a means to develop understanding to plan organizational change. To fully appreciate the model, there must be an acknowledgment of the differences between the transformational and transactional factors. The transformational factors include mission and strategy, leadership, organizational culture, and external environment. The transactional factors include structure, management practices, systems, climate, task requirement and individual skills/abilities, individual needs and values, and motivation. The individual and organizational performance box serves as the output for both the transformational and transactional factors. The external

environment box also represents the input into the organization and the performance box serves as the output from the organization. There is a continuous interaction with the input and the output factors as displayed by the feedback loop. The lines throughout the model have arrows on both ends to represent the two-way interaction. This two-way interaction means that a change in one factor will eventually affect the entire organization.[52]

The model also takes into consideration the different levels of the organization: large system, group, and individual levels. The acknowledgment of these levels is not as crucial as the transformational and transactional factors. Instead, a recognition of the levels provides a means to identify the various responses to change throughout the organization. The factors of mission and strategy, leadership, and culture are more applicable at the large system level. At the group level, structure, management practices, systems, and climate are more relevant. Finally, for the individual level, the factors of task requirement and individual skills/abilities, individual needs and values, and motivation are more pertinent. As described previously, the various levels are not strict boundaries but instead serve as a method to enhance awareness. While the identification of the different levels has value, it is essential to recall that the model uses a whole systems approach to evaluate and implement organizational change.[53]

Transformational and Transactional Factors

Beyond the levels of change, the transformational and transactional factors are the essential features of the model to understand organizational change. The model derives the theory and language for these factors from James McGregor Burns' work on transformational and transactional leadership[54]. "Transformational leadership is the process whereby a person engages with others and creates a connection that raises the level of motivation and morality in both the

[52] Burke, *Organization Change*, 226-228.

[53] Ibid., 227.

[54] Ibid., 229.

leader and the follower."[55] From a change perspective, transformational leaders "never leave a situation the way they found it, and the situation (organization, community, nation, etc.) will be different as a consequence of these kind of leaders."[56] Transformational leaders make a profound and lasting impact on the organization. Conversely, "transactional leader are those who see the leader-follower relationship as just that, a transaction: "If you do such and such for me, I'll see that you (follower) get rewarded" (promotion, bonus, time off, etc.)"[57] The transactional leader's impact is generally only felt while he is present in the organization. Burke identified a transformational leader as someone who executes revolutionary change. Transactional leaders can also achieve change, but their change tends to be gradual, evolutionary, and focused on preserving the status quo.[58] Burke then uses the ideas of transformational and transactional leaders within his model to create transformational and transactional factors. The boxes in the top of the model are transformational factors used to evaluate and execute revolutionary change. The factors in the bottom half are the transactional and are more applicable to the day-to-day processes within the organization. Organizational leaders can use the transactional factors to make continuous improvement, and the transformational factors to execute extensive revolutionary change.

Within the model, the transformational factors used to perform revolutionary organizational change include external environment, mission and strategy, leadership, and organizational culture. To provide clarity to the meaning of each of the factors, Dr. Warner Burke provides additional commentary. The external environment includes the variables, forces, or other systems that influence the organization. These forces consist of "competition, political

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[55] Peter Guy Northouse, *Leadership: Theory and Practice.* 6th ed. (Thousand Oaks, CA: SAGE, 2013), 186.

[56] Burke, *Organization Change*, 229.

[57] Ibid., 229.

[58] Ibid., 229.

circumstances, government regulations, world financial and economic conditions, and changing technology."[59] The external environment box also serves as the input into the organization from the open systems theory perspective. The mission and strategy focus on the purpose of the organization. Core competencies are a synonym for mission and considers the impact if the organization did not exist. The strategy considers how a leader is going to accomplish the mission. The leadership box in the model is about providing direction through "persuasion, influence, serving followers, and acting as a role model, and not command and control, domination and serving edicts instead of followers."[60] The culture box is the final transformational box and concentrates on the norms and rules that the organization follows, both explicit and implicit. The explicit rules or norms for the organization are in writing or declared by people with authority. People also follow the implicit rules, but these implicit rules are unwritten and derive from historical actions within the organization. The interactions of the external environment with the mission and strategy, leadership, and culture provide the drive for revolutionary change.[61]

The lower half of the model includes the transactional factors. These factors include structure, management practices, systems, climate, task requirement and individual skills/abilities, individual needs and values, motivation, and individual and organizational performance. The structure box takes into consideration the organization chart and composition of organizational functions. Management practices takes into account the actions of the managers and the managers interaction with direct reports. Management differs from leadership and focuses more on the accomplishment of tasks and projects to achieve the strategy. Systems are the policies and procedures to assist in the achievement of assigned responsibilities. Climate focuses on the perceptions of individuals within the same workgroup. These collective perceptions form around

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[59] Burke, *Organization Change*, 232.

[60] Ibid., 233.

[61] Ibid., 231-234.

such topics as the management's actions, their recognition for performance, and their input into the decision-making process. The task requirement and individual skills/abilities box considers the differences between the requirements of a position and the knowledge and skills of an individual in that position. The next box is individual needs and values. This box assesses the degree to which a job can meet a person's needs. These needs can include security or recognition of success. Motivation is the last box, and the two previously described factors directly impact motivation. When worker's skills align with the job and managers meet worker's needs, the workers tend to have increased motivation.[62]

The last box at the bottom of the model is individual and organizational performance. As an open system model, the performance box applies to both the transformational and transactional factors and serves as the output into the external environment. These outputs are the result of the activities that occurred in all the levels throughout the organization. As depicted in the model, there is continuous feedback between the performance box and the external environment.[63]

The Burke-Litwin model provides the necessary framework to evaluate the Army's organizational change to AirLand Battle. Going forward, the transactional factors will not be evaluated in the case study due to their association with evolutionary change at the group and individual level. The transformational factors from the model are most important to consider when evaluating large scale revolutionary change. An examination of the external environment along with the Army's mission and strategy, leadership, culture, and performance provide the basis to answer the questions on how the leaders executed the change and why the change endured. The case study in the next section provides the details of the revolutionary change using the transformational factors and not the transactional factors.

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[62] Burke, *Organization Change*, 234-236.

[63] Ibid., 237.

Case Study: Transition to AirLand Battle

In 1973, the US Army completed its withdrawal of forces from Vietnam and returned to the United States as a defeated organization. For much of the Vietnam War, the Army executed small unit tactics in a counterinsurgency style of warfare. Despite the Army being internally degraded following Vietnam, the strategic environment required that the Army be ready to defeat the Union of Soviet Socialist Republics (USSR), which is also known as the Soviet Union. To achieve a victory against an enemy with similar capacities on a large scale, the Army required a revolutionary change. Two organizational leaders, General DePuy and General Starry, spearheaded the initiative and transformed the Army. This revolutionary change eventually resulted in a mission and strategy known as AirLand Battle they released in 1982. Despite not fighting the Soviet Union, the Army did defeat a formidable enemy during the Iraq War in 1991 using the AirLand Battle Doctrine. The victory demonstrated the Army's performance and successful change following the Vietnam War.

To understand the specifics of the change, this case study will use the transformational factors from the Burke-Litwin Model to examine the Army's large-scale revolutionary change to Air Land Battle. The transactional factors of the Burke-Litwin model are not being considered in because they tend to more linked to evolutionary change at the group and individual level. Their exclusion may present a potential disparity because the Army is an open system and multiple variables that could impact the change. Nonetheless, as described in the open systems theory section of this paper, a frame is an arbitrary tool that provides the opportunity to better examine the interactions of selected variables in a system. Dr. Warner Burke validated that the interaction of transformational factors with the external environment has the most significant impact on the organization when executing change.[64] Thus, a frame that includes the external environment,

[64] Burke, *Organization Change*, 238.

transformational factors, and the performance of the Army provides the ideal means to examine the transition to AirLand Battle.

External Environment

The examination of the US Army's external environment following the Vietnam War includes information on the political circumstances, competition, changing technology, and resources. Across all these variables, the one consistent notion was that the United States was in competition with the Soviet Union. This rivalry remained continuous through the implementation of AirLand Battle in 1982.

President Richard Nixon took office in 1969 and set the United States on a new direction of foreign policy. He was aware of the dynamic international environment and the declining US Power. His new strategy sought "to exploit the rivalry between the two Communist adversaries, scaling back international commitments, and using regional powers to promote world order".[65] This idea set in motion the eventual withdraw of military forces from Vietnam in 1973, and then following the withdraw, Nixon, focused on detente with the Soviet Union. However, this idea of cooperation with the Soviets came to a halt during the Watergate Scandal.[66] Nixon eventually resigned from office, and his successor, President Gerald Ford, did not progress detente with the Soviet Union.[67]

When Ford took office in 1974, the foreign policy gradually started to shift to a more assertive stance towards the Soviet Union. Ford assembled a team of experts to evaluate the Soviets. The team concluded "that the Soviet Union was seeking military superiority and indeed global hegemony and was exploiting détente to that end."[68] As a continuation of the

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[65] George C. Herring, *From Colony to Superpower: US Foreign Relations since 1776*. (New York: Oxford University Press, 2008) 760.

[66] History.com Editors, "Détente," A&E Television Network, last modified June 7, 2019, https://www.history.com/topics/cold-war/detente.

[67] Herring, *From Colony to Superpower*, 829.

[68] Ibid., 830.

investigation, a committee known as the Committee on Present Danger continued to push within the government for the United States to have military superiority. This committee saw Communism as an unmitigated evil that required a massive military buildup. Through this buildup, the military could contain and then destroy Communism.[69]

The increase in the military posture against the Soviets continued with the next two presidential administrations. President Jimmy Carter unsuccessfully attempted détente with the Soviet Union and maintained the military buildup.[70] Carter also authorized the covert military actions against the USSR in Afghanistan.[71] President Ronald Reagan took office in 1981 and sought to confront the Soviet Union for a position of military strength. Reagan embraced the ideals of the Committee on Present Danger and wanted to defeat the Soviet government.[72] In sum, from the time the US Army departed Vietnam, the United States' foreign policy focused on countering Soviet aggression, but an increase in US military power did not occur immediately.

The USSR acknowledged this ongoing confrontation and took the initiative by making significant financial investments in their military. As the United States was downsizing after the Vietnam War, the Soviet Union continued to make enhancements in their tactical and the strategic weapons systems. From 1974 to 1983, the total cost of the Soviet military program was 35% greater than the United States' military, and the Soviet's weapons procurement was 50% greater.[73] This funding allowed the Soviet to surpass the United States in the production of fighters, bombers, tanks, submarines, and ballistic missiles. In addition to an increase in overall numerical superiority, the Soviets also updated their doctrine.[74] The Soviet Union took

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[69] Herring, *From Colony to Superpower*, 830.

[70] History.com Editors, "Détente."

[71] Herring, *From Colony to Superpower*, 860.

[72] Ibid., 862.

[73] US Department of Defense, *Soviet Military Power* (Washington, DC: US Government Printing Office, 1985), 10.

[74] Lawrence Freedman, *Strategy: A History*. (New York: Oxford University Press, 2013), 199.

advantage of the US military's need to refocus after the Vietnam War and made considerable expenditures and advancements in their military.

In addition to the Soviet Union's increasing military power, the 1973 Arab-Israeli War displayed the lethality of the newly acquired technology on the battlefield. In this war, the Arabs nations used equipment from the Soviet Union, and the Israelis used equipment like the US's equipment. This short war identified many of the challenges the US Army could encounter in the event of a conflict with the Soviet Union. In the eighteen-day war, the Arabs brought 4000 tanks and lost between 1500-2000 tanks. The Israelis had 2000 tanks and lost between 700-1000 tanks. To provide a comparison, in 1973, the United States only had 1700 tanks in all of Europe. Part of the reason for the increased lethality was because the distance to destroy targets increased from 500 meters in World War II to now being able to hit a target at 3000 meters.[75]. This significant destruction on the battlefield from new technology caught the attention of the US Army leaders.

Despite the threat from the Soviets and the extreme outcomes of the Arab Israeli War, the US Army operated in a resourced constrained environment after departing the Vietnam War. These constraints included budget reductions and a decrease in the size of the force. From a monetary perspective, the Army's budget began to decrease in 1969 and continued to decline until 1976. Not until 1977 did the Army's budget begin to increase.[76] Simultaneous to a budget decreases, the total number of Soldiers in the Army decreased by about half in four years. In 1969, the Army had almost 1.6 million Soldiers, and then in 1973, there were only about 800,000 Soldiers in the Army. Then in 1973, the US Government ended the draft, and the Army now had to recruit people to join the ranks. With an unpopular war, recruiting high-quality candidates to join the Army was very challenging.[77] A decrease in resources coupled with a current threat

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[75] William E. DePuy, *Selected Papers of General William E. DePuy*, compiled by Richard M. Swain. (Fort Leavenworth, KS: Combat Studies Institute, 1994), 78-80.

[76] US Department of Defense, *National Defense Budget Estimates for FY2015* (Washington, DC: Office of the Under Secretary of Defense (Comptroller), 2014), 197-198.

[77] James Kitfield, *Prodigal Soldiers* (Washington, DC: Brassey's, 1997), 148.

from the Soviet Union in the external environment that set the conditions for US Army to execute revolutionary change.

Mission and Strategy

The legitimate competition in the external environment with the USSR required the US Army to continuously evaluate and update its mission and strategy through the release of new doctrine. The US Army uses doctrine as the primary means to convey its mission and strategy. Army Doctrine is the "fundamental principles…used for the conduct of operations" and the "guide for actions of the operating forces and elements of the institutional force that directly support operations in support of national objectives."[78] Following Vietnam, the US Army lacked doctrine to address the threat posed by the Soviet Union. In response, the Army released doctrine in 1976 in Field Manual 100-5 Operations, which was also known as Active Defense. Recognizing there were shortcomings in the Active Defense, the Army released updated doctrine in 1982 of FM 100-5, Operations, which was known as AirLand Battle. Both the 1976 and 1982 versions of FM 100-5 served as the foundational source to define the mission and strategy for the Army during the execution of the revolutionary change.

The 1976 version of FM 100-5 laid the foundation to refocus the Army after fighting in Vietnam. The basis of the manual acknowledges the overwhelming threat of the Soviet Union. The manual begins by stating, "We cannot know when or where the US Army will again be ordered into battle, but we must assume the enemy we face will possess weapons generally as effective as our own. And we must calculate that he will have them in greater numbers than we will be able to deploy, at least in the opening stages of a conflict."[79] Thus, to survive the initial battles, the US Army needed to have an active defense with the premise to "prepare to fight

[78] US Department of the Army, Field Manual (FM) 1-02.1, *Operational Terms* (Washington, DC: Government Printing Office, 2019), 1-6.

[79] US Department of the Army, Field Manual (FM) 100-5, *Operations*, (Washington DC: Government Printing Office, 1976), 1-1.

outnumber, and win."[80] This doctrine provided the tactics and techniques necessary to win through a maneuver defense. The manual also provided the baseline to begin the restructuring of other doctrinal manuals in the Army[81]. The Army's revised mission and strategy as articulated through the 1976 version of FM 100-5, began the process of organizational change.

FM 100-5 from 1976 provided a new direction for the US Army following the Vietnam War, but there were challenges in the implementation of this defensive based doctrine. There were concerns with the applicability of the doctrine outside of Europe and against Soviet Threat. At the tactical level, there were concerns with the ability to reposition forces while under fire and a lack of a dedicated reserve increased risk to an intolerable level.[82] The Active Defense manual reoriented the US Army on the Soviet threat, but there was a desire to defeat the Soviets and any other potential threat and thus arose the need for an offense based mission and strategy. The 1982 FM 100-5 "reflected in line with the shift in the national strategic perceptions since the late 1970s, the more condiment tone of an offense-oriented military operational doctrine."[83] This new doctrine centered around the idea of AirLand Battle, which emphasized offense operations at extended ranges with the added focus on the use of the firepower from aircraft. The new manual stated that "Airland Battle will be dominated by the forces that retain the initiative and, with deep attack and decisive maneuver, destroys its opponent's abilities to fight and to organize in depth."[84] This new mission and strategy provided an updated mission and strategy to implement the revolutionary change. There were some slight adjustments to Airland battle in an updated FM 100-5 in 1986, but principles of AirLand Battle remained the same through the end of the Cold

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[80] US Army, FM 100-5 (1976), 1-2.

[81] John Romjue, *From Active Defense to Airland Battle: The Development of Army Doctrine, 1973-1982* (Washington DC: US Government Printing Office, 1984), 4.

[82] Ibid., 21.

[83] Ibid., 66.

[84] US Army, FM 100-5 (1982), 1-5.

War against the Soviets.[85]. Airland Battle served as the Army's capstone mission and strategy for the execution of the revolutionary change following the Vietnam War.

Leadership

The implementation of the Army's mission and strategy detailed in FM 100-5 required the leadership of Generals William E. DePuy and Donn A. Starry. They were the first two commanders of the newly formed US Army Training and Doctrine Command, (TRADOC) which was the segment of the Army responsible for the development and publishing of Active Defense and AirLand Battle. Both leaders used transformational, adaptive, and audacious leadership to execute revolutionary change.

General DePuy was the very first commander of TRADOC and took command in 1973. From the start, DePuy remained acutely aware of the Army's external challenges and the need for change. He used the 1973 Arab-Israeli War to identify the potential hardships the US Army would encounter in the event of a war with the Soviet Union. He summarizes the lessons learned from his Arab-Israeli War in a presentation.

> First, modern weapons are vastly more lethal than any weapons we have encountered on the battlefield before. Second, in order to cope with these weapons, it is essential we have a highly trained and highly skilled combined arms team of armor, infantry, artillery and air defense backed by the support required to sustain combat operations. Third, the training of the individual as well as the team will make the difference between success and failure on the battlefield.[86]

DePuy also acknowledged the limited resources available to the Army. In a 1974 speech at the TRADOC Leadership Conference, General DePuy stated that the United States should be prepared to fight outnumbered against an adversary that had equipment comparable to the US Army's capabilities.[87] DePuy used the dynamics in the external environment, and with his team, wrote the new Army's new mission and strategy in the 1976 FM 100-5 known as Active Defense.

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[85] US Army, FM 100-5 (1986), i.

[86] DePuy, *Selected Papers of General William E. DePuy*, 76.

[87] Ibid., 114.

General DePuy remained in command of TRADOC until 1977 and had time to oversee the initial implementation of Active Defense.

The next commander of TRADOC was General Starry. Before assuming command, Starry commanded V Corps in Europe, and he had an extensive understanding of the threat from the Soviet Union. Starry and DuPuy also had a strong relationship and had worked together over the years. While DuPuy was in command of TRADOC, he continued corresponding with Starry and provided Starry advanced copies of doctrinal material.[88] As commander of TRADOC, Starry was proud to continue the strategy and work that DuPuy had begun. This continuity of similar leadership ideals allowed for perseverance of the change effort.[89]

Upon taking command, Starry was fully aware of the shortcomings of Active Defense from the 1976 FM 100-5 and recognized the need for a new version of FM 100-5. Starry wrote a letter in 1979 to the Army Chief of Staff and acknowledged the needed changes in a new FM 100-5. These changes included making the new doctrine that would be appliable beyond just the terrain in Europe and would focus more on offensive and deep operations.[90] Starry used the aversion for Active Defense as an impetus to drive the development of AirLand Battle and unveiled the concept in 1980 at the Army Commander's Conference.[91] Starry also recognized the importance of the external environment and corresponded with US Secretary of State to identify the positive impact of AirLand Battle "in pursuit of national political aims in many areas against many adversaries."[92] Starry continued to lead with audacity until he completed his time as commander of TRADOC in 1981. Fortunately, he built enough momentum, and in 1982, TRADOC released the updated FM 100-5 that replaced Active Defense with AirLand Battle.

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[88] Donn A. Starry and Lewis Sorley, *Press On!: Selected Works of General Donn A. Starry*. 2 vols. (Fort Leavenworth, KS: Combat Studies Institute Press, 2009), xii – xiii.

[89] Ibid., 279.

[90] Ibid., 343

[91] Ibid., 370.

[92] Ibid., 371.

Organizational Culture

Upon returning from the Vietnam War, two significant programs impacted the organizational culture of the Army, Project Volar and Operation Steadfast. As a review, organizational culture takes into consideration the norms and rules that the organization follows, both implicit and explicit.[93] Project Volar had a stated goal to improve conditions for Soldiers at specific locations, and over time implicitly developed new norms that improved the treatment and quality of life for Soldiers across the entire Army. Operation Steadfast also had an explicit aspect that led to the creation of the Training and Doctrine Command (TRADOC) and Forces Command (FORSCOM), and eventually, this program led to implicit new norms. Both Project Volar and Operation Steadfast contributed to the revolutionary change in the Army.

With the draft ending soon, the US Army had to reevaluate its organizational culture to attract talented and diverse citizens to become Soldiers. Project Volar attempted to enhance the living conditions and minimize some of the displeasures of being a Soldier. The project started as an experiment on four army posts and gave the Commanders flexibility to develop their initiatives. Once the Commanders submitted their proposal and the Department of the Army approved, the commanders would receive funding to execute the program. Some examples of improvements included the hiring of civilians to perform kitchen duties and other menial tasks, improving Soldier living areas, and giving Soldiers more time off duty. There was some dissent to Project Volar, but overall the program was a change for the better. The program also expanded to other Army bases, and funding increased to support the program.[94] In an evaluation of the program, "the trends over time were more favorable at the Valor posts, particularly among

[93] Burke, *Organization Change*, 233.

[94] Gus C. Lee and Geoffrey Y. Parker, *Ending the Draft- The Story of the All Volunteer Force* (Alexandria, VA: Human Resources Research Organization, 1977), 154-156.

younger men with less than two years of service."[95] Project Volar set a new precedence for the Army and established more favorable conditions to encourage enlistment in the US Army.

Before Operation Steadfast, the Continental Army Command (CONARC) was responsible for all US Army forces within the United States. CONARC commanded all active units and was responsible for training, schools, and the writing of doctrine. The requirements on CONARC were overly excessive. To evaluate this overburdened command, the Parker Board deliberated for two years and made the recommendations to the Chief of Staff of the Army to reorganize the subordinate commands of the Army. The Chief of Staff decided to execute Operation Steadfast and this led to the creation of TRADOC and FORSCOM in 1973. TRADOC would be responsible for all the training, school, doctrine, combat developments. While FORSCOM would assume command of all the active units within the United States. At the time, Lieutenant General William DePuy was the officer responsible for the execution of Operation Steadfast, and then he eventually became the first commander of TRADOC. TRADOC was the primary organization responsible for the revolutionary change in the US Army to reorient on the threat from the Soviet Union.[96]

Organizational Performance

The US Army successfully demonstrated their organizational performance in 1991 during the Desert Storm War. Prior to the Desert Storm War, the US Army continued to concentrate efforts to defeat the Soviet Union until the end Cold War in 1989.[97] Yet, through the end of the Cold War, the US Army did not ever engage in direct ground combat with the Soviets. Instead, in 1991, the US Army went to war against the Iraqi Army in Operation Desert Strom. The Soviet Union previously sponsored the Iraqi Army, and thus the Iraqis used equipment and tactics very

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[95] Lee and Parker, *Ending the Draft*, 459.

[96] Del Stewart, *Victory Starts Here: A Short 45-Year History of the US Army Training and Doctrine Command* (Fort Leavenworth, KS: Army University Press, 2018), 1-2.

[97] Stewart, *Victory Starts Here*, 3.

similar to the Soviet Union.[98] Fortunately, Desert Storm was a "dazzling display of modern, high-tech military power" that after five weeks of attacks from the air, the US Army and coalition forces defeated the Iraqi Army in only 100 hours.[99] This overwhelming victory led to pride for Americans still haunted by the Vietnam War and demonstrated the resolve of the volunteer army.[100] The US Army used the doctrine of AirLand Battle to succeed in ground combat during the Desert Strom War.[101] Research suggests that Desert Storm commanders successfully used the imperatives from AirLand Battle in both planning and executing the ground offensive against the Iraqi Army. These imperatives include unity of effort, concentrating combat power against enemy vulnerabilities, and anticipate events.[102] Through the resounding success against a Soviet style threat, the US Army's performance demonstrated the positive output of the revolutionary change to AirLand Battle.

Analysis

Following the Vietnam War, the US Army executed revolutionary change that did not follow a step by step closed system approach like Kotter's change model. Instead, the change process involved continuous input from the external environment and took into consideration the interaction of multiple variables over time. The Burke-Litwin model provided an open system approach to evaluate the US Army's revolutionary change. Specifically, the transformational factors of the model provided the necessary frame to evaluate the change. This analysis section synthesizes the information from the organizational change theories and the case study sections of the paper to answer the initially proposed research questions. For review, the first research

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[98] Herring, *From Colony to Superpower*, 912.

[99] Ibid., 910.

[100] Ibid., 912.

[101] Stewart, *Victory Starts Here*, 51.

[102] Robert J. Paquin, "Desert Storm: Doctrinal AirLand Battle Success or "The American Way of War" (masters monograph, School of Advanced Military Studies US Army Command and General Staff College, 1999), 46.

question considers how Army leaders successfully executed the change. The next question evaluates why the change endured, and the final question assesses how this change is applicable for future change initiatives.

The first question asks how US Army leaders completed the revolutionary change following the Vietnam War. Generals William E. DePuy and Donn A. Starry were the primary leaders responsible for the charge to AirLand Battle. Both leaders positively contributed to the change by maintaining an open systems approach, as demonstrated by their continual awareness of the external environment and then adapting as necessary. At the end of the Vietnam War, DePuy was able to visualize the necessary changes to meet the threat from the Soviet Union. The Army then selected DePuy to becomes the first commander of TRADOC. Shortly after taking command, he acknowledged the technological advances and lessons learned from the 1973 Arab-Israeli War. Domestically, he was also aware that the US Army would have constrained resources. Considering these multiple factors from the external environment, DePuy changed the mission and strategy for the US Army by releasing an updated FM 100-5. This new doctrine of Active Defense aligned with the conditions of the external environment. The US Army had to rebuild, and a defensive posture was the best option against a numerically superior Soviet Army. This new direction initiated the change process, and the US Army began to rebuild after the Vietnam War.

Continuity of leadership ideals is also critical to maintaining a large-scale revolutionary change. While DePuy was in command of TRADOC, he continued a relationship with Starry. This relationship between DuPuy and Starry would be critical in the overall rebuilding process. After Starry left command of the Corps on the front lines in Europe, he replaced DuPuy and became the TRADOC commander. With influence from DuPuy and an awareness of the external environment, Starry began the process of implementing a new mission and strategy for the US Army known as AirLand Battle. This persistence in leadership perspectives and a continual adjustment based on the external environment allowed for a successful revolutionary change.

The second question considers why the change endured and succeeded despite the dynamic external environment, which included several Presidential administrations. The most apparent answer is the persistent competition with the Soviet Union throughout the entire change process. Despite the US foreign policy adapting for each President's administration, the consistent tend was that the United States identified the Soviet Union as a threat. This regular competition in the external environment provided the US Army with an enduring goal to defeat the Soviet Union. While the methods to achieve the goal changed based on a multitude of other factors, the desired future state remained the same. When executing revolutionary change, a continual competition from the same actor allows for the change to endure. The US Army used the continual competition in the external environment to rebuild the Army and create a new mission and strategy. The Army then tested these changes in the Desert Storm War against a Soviet style threat, and the changes proved to be effective.

The final question evaluates how the accomplishments of the change to AirLand Battle are applicable when planning future revolutionary change for the Army. The answer is to use an open systems approach when planning revolutionary change. While this solution may sound simple, the implementation of this new way of thinking about organizational change would require a shift in how the Army educates leaders. Revolutionary change is not a straightforward linear step by step process; instead leading change requires audacious leaders who can assess and adjust based on the interaction of variables across multiple systems. The capacity to assess the interactions of variables across systems is a cognitive ability. The Burke-Litwin Model is an open system model that provides a comprehensive framework to evaluate the multiple variables across organizations when considering a change. This model is not the absolute answer, but just a method to assist in shaping how leaders should think. Generals DePuy and Starry did not have the Burke-Litwin Model to assist with their revolutionary change, but they certainly did have the cognitive abilities to execute the change. The success of the US Army to implement future

revolutionary change is contingent upon developing leaders who know how to appropriately think about change.

Conclusion

Following the Vietnam War in 1973, the US Army required organizational change to meet the demands of the external environment. In the years leading up to 1973, the US Army fought a small-scale insurgency style of warfare in Vietnam, while the Soviet Union increased its military capabilities to fight a large-scale combat operation. This increase in communist capabilities led to a more significant threat to the United States. Additionally, the Arab-Israeli War demonstrated the increased lethality from the new military technology in the event of a war with the Soviet Union. Despite the threat, the US government ended the draft, and the US Army decreased in size and experienced budget cuts. This dynamic external environment required a change initiative that did not follow a typical step by step approach or checklist. Instead Generals William E. DePuy and Donn A. Starry recognized this dynamic environment and initiated revolutionary change using an open systems approach.

The Burke-Litwin Model of Organization Performance and Change is an open systems model used to assess and execute revolutionary large system change. This model served as the framework to evaluate the revolutionary change led by Generals DePuy and Starry. The transformational factors of the model are relevant in this case study because of their direct interaction with the external environment and their significant impact on the entire US Army. These factors include the US Army's mission and strategy, leadership, and organizational culture. The transformational factors require visionary leadership and cause the most significant impact when planning and executing revolutionary change.[103] Through these factors, DePuy and Starry

[103] Burke, *Organization Change*, 229.

completed a successful organizational change, as demonstrated by the US Army's victory in the Desert Storm War against the formidable Iraqi Army.

Presently, the US Army is in a state of transition, like the period after the Vietnam War. The US Army is transitioning for executing small scale counterinsurgency style operations in Iraq and Afghanistan to preparing to execute large scale combat operations across multiple domains against a threat with similar capabilities. The Army's desired future state is to achieve the capacity and capabilities necessary to execute Multi-Domain Operations successfully. To attain this desired future condition as efficiently and effectively as possible, the Army should consider revising their organizational change doctrine to focus on an open systems approach.

The transition to AirLand Battle demonstrated that organizational change does not follow a closed system and linear approach. Instead, large scale revolutionary change requires an open system approach as displayed by the Burke Litwin Model. Nonetheless, US Army Doctrine suggests that leaders should use a linear closed system approach to implement organizational change. The Army Doctrine currently provides a linear checklist for leaders to follow when executing organizational change. As an alternative, the Army should modify the organizational change doctrine also to include open systems theory when planning and executing organizational change. The Army Design Methodology manual already has information on systems thinking, and with some slight modifications, system thinking could also be included in the Army's leadership manual to address organizational change.

This addition to the leadership doctrine could then lead to an update on how the Army educates organizational leaders at the Command and General Staff Officers Course. Instead of providing these mid-grade organizational leaders, a single lesson on John Kotter's 8-Step Change Model, the education could be adapted to include an open systems leadership model like the Burke-Litwin Model. This open systems approach will provide a more holistic method to understand the interactions between the multiple variables and resistance to change internal and external to the organization. This education could include understanding the differences between

evolutionary and revolutionary change, transformational and transactional factors, and how change is different within various levels of an organization. This comprehensive understanding of an organization provides a leader with more tools to overcome resistance to change. Inevitability, there will be resistance to change within the Army, and it is improbable that organizational change will follow a step by step approach as outlined in a sequential change model like Kotter's 8-Step Change Model. An open systems model provides a new way to evaluate organizational change. This enhanced understanding of organizational change would then equip the Army's organizational leaders to plan and execute organizational change more efficiently and effectively.

This recommendation to update the US Army's doctrine on organizational change could be further expanded with additional studies. The case study in this paper only considered the transformational factors of the Burke-Litwin model at the large system level of the US Army. In a supplementary study, a researcher could evaluate the transactional factors of the Burke-Litwin model during the US Army's transition following the Vietnam War to Airland Battle. An additional study could also take into consideration the impact of the revolutionary change to AirLand Battle at the individual and group level within the US Army. A final study could consider how to incorporate Kotter's Change model within an open system model during revolutionary change. These additional studies would provide a complete recommendation on how to further enhance the US Army's doctrine on organizational change.

In closing, the US Army's organizational leaders frequently attempt to execute different types of change within their organizations but have differing degrees of success. Unfortunately, Army schools and doctrine contain an inadequate amount of knowledge on the process required to plan and implement organizational change. This paper provided a new perspective to evaluate organizational change within the Army through the integration of theory, doctrine, and a historical case study. Since 2001 the US Army primarily focused on training and fighting a counterinsurgency style of small-scale warfare in Afghanistan and Iraq. Starting in 2017, the US

Army changed its mission and strategy to prepare to fight large scale combat operations and defeat an enemy with similar or better capabilities. This ongoing change within the US Army requires leaders who have the cognitive abilities to overcome resistance to change from an open systems approach and not a check list.

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