

RETHINKING STRATEGY: ART LYKKE AND THE DEVELOPMENT OF THE
ENDS, WAYS, MEANS MODEL OF STRATEGY

A thesis presented to the Faculty of the U.S. Army
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fulfillment of the requirements for the
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MASTER OF MILITARY ART AND SCIENCE
Art of War Scholars

by

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

RETHINKING STRATEGY: ART LYKKE AND THE DEVELOPMENT OF THE ENDS, WAYS, MEANS MODEL OF STRATEGY, by Andrew C. Webb 108 pages.

The “Ends, Ways, Means” model is the U.S. military’s strategy model. Despite its prominence, there is little in the existing literature that explains the model’s origins, theoretical basis, or development by its author, Arthur F. Lykke, Jr. Using a historical evaluative approach, I examine the development of the “Ends, Ways, Means” model using Lykke’s Senate testimony, versions of his 1989 *Military Review* article, and the course reference text he edited at the U.S. Army War College. I place the model’s gradual acceptance in the context of the 1980s global security environment, changes within the U.S. Army, and the Weinberger Doctrine that established conditions for the use of military force by the U.S. Secretary of Defense. I argue that Lykke’s “Ends, Ways, Means” model gained acceptance in the U.S. Army not because of the soundness of the model but instead as a result of Lykke’s incidental emergence as an expert, his control of the primary strategy course text at the U.S. Army War College, and because of the specific circumstances of the 1980s. I conclude that the inherent flaws in “Ends, Ways, Means” make it a problematic model for the current and future strategy needs of the U.S. military.

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This thesis is the culmination of several years of thought, writing and rewriting. I asked the initial question while a student at Johns Hopkins' SAIS. Later, while teaching at the U.S. Military Academy, initial presentations to faculty research seminars in the Department of Social Sciences and at the Modern War Institute demonstrated the need for further study. Feedback from a paper I wrote for the 2017 Biennial Inter-University Seminar on Armed Forces and Society that contrasted "Ends, Ways, Means" with other strategy frameworks encouraged me to continue with the project.

The paper that now exists is a product of the opportunity afforded by being an Art of War Scholar at the Command and General Staff Officer's Course at Fort Leavenworth, Kansas. Dr. Dean Nowowiejski secured funding for my research and provided invaluable mentorship. My fellow scholars also patiently humored my diatribes, identified and pushed back on the many weaknesses of my argument, and yet always encouraged me along. Thanks to the efforts of Mr. Mike McVicar, I presented a draft of Chapter 2 at the 2019 STRATCOM Academic Alliance Workshop and received invaluable feedback from my panel chair, U.S. Army Colonel Barry Stentiford. My thesis committee set a high standard, resulting in a much better paper. While it remains to be seen if this will be the "greatest year of my life," I will remain grateful for the opportunity to pursue this project while also fulfilling my other roles as soldier, scholar, athlete, husband and dad.

Of course, taking on this project amidst a Ph.D., the challenges of learning to be a Field Grade officer, and an impending move to our 10th home in six years would have been neither possible nor worth it without the support and love of my wife, Colleen, and our children Owen, Dory, Georgia and a fourth *in utero*, to be named later.

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CHAPTER 1

STRATEGY: HOW TO THINK, HOW TO WIN

Research Purpose

The purpose of this thesis is to understand and analyze the “Ends, Ways, Means” model of strategy developed by Arthur F. Lykke, Jr. at the U.S. Army War College between 1982 and 1989. I use a historical evaluative approach to examine the development of the “Ends, Ways, Means” model using Lykke’s Senate testimony, several versions of the article in which he explained the model, and two editions of the primary course reference text Lykke edited for teaching strategy at the U.S. Army War College. I place the model’s gradual acceptance from 1982 to 1989 in the context of the 1980s global security environment, changes within the U.S. Army, and the Weinberger Doctrine that established conditions for the use of military force by the U.S. Secretary of Defense.

The broader purpose of this research is to fill a gap in the existing literature on how the U.S. military thinks about, formulates, and evaluates strategy by showing the origins of the model that is current U.S. military doctrine. The authors of the 2010 version of U.S. Army Field Manual 5-0 claim that “while each plan is unique, all plans seek a balance for combining ends, ways, and means against risk.”¹ Those of the 2017 version of Joint Publication 5-0 say that “joint planning is the deliberate process of determining how (the ways) to use military capabilities (the means) in time and space to achieve objectives (the ends) while considering the associated risks.”² More recently, the

¹ Headquarters, Department of the Army, *FM 5-0: The Operations Process*, (Washington, D.C.: Department of the Army Headquarters, March 18, 2010), 2-87.

² Headquarters, Joint Chiefs of Staff, *JP 5-0: Joint Planning*, (Washington, D.C.: Department of Defense Headquarters, June 16, 2017), I-1.

authors of the 2018 version of *Joint Doctrine Note 1-18: Strategy* say that “all strategies entail the same fundamental logic of ends, ways, and means.”³ While all of these doctrines share the same terms and logic, none cite Lykke as the source. Instead, the doctrine writers surround the discussion of “Ends, Ways, Means” with vignettes, quotations, and references to historical figures such as Sun Tzu, Clausewitz, Moltke the Elder, and B.H Liddell Hart. These references imply that these figures of different eras and cultures agreed about the nature and purpose of strategy, understood it in similar terms, and would likely approve of the modern American military model of strategy. I believe these quotations confer upon “Ends, Ways, Means” historical and intellectual legitimacy that is misleading. By showing the origins of what the accepted model for how the U.S. military thinks about strategy is, I question the ability of “Ends, Ways, Means” to serve the strategy-making needs of the U.S. military in the modern world.

To do this, I examine the primary source record related to the development and eventual acceptance of Lykke’s “Ends, Ways, Means” model. This primary source record includes transcripts of congressional testimony, published articles in professional military journals, and course texts available in some U.S. Army research libraries, material from the U.S. Army Heritage and Education Center’s archive, and interviews with Colonel Arthur F. Lykke, Jr., U.S. Army, retired. For the archival work, I used materials from the U.S. Army Heritage and Education Center’s archive that would not otherwise be available to scholars. The use of these sources allowed a unique look at the development of Lykke’s “Ends, Ways, Means” model from its original appearance in Lykke’s dream,

³ Headquarters, Joint Chiefs of Staff, *Joint Doctrine Note 1-18: Strategy*, (Washington, D.C.: Department of Defense Headquarters 25 April 2018), v.

through its rejection of his article by U.S. Army professional military journals, and eventually its gradual acceptance just as the Berlin Wall fell. This study is the first of its kind to synthesize the foundational ideas and concepts that guided the development of the “Ends, Ways, Means” framework and the contemporaneous and subsequent critiques of Lykke and his model. It also adds a historical basis for the concerns of a number of critics who question the framework’s logic and utility.⁴

Research Question

This thesis asks the following questions:

1. Who is Arthur F. Lykke, Jr. and why did he develop the “Ends, Ways, Means” model of strategy?
2. How did Lykke articulate the model and how did his contemporaries react to his new model?
3. How did Lykke’s position at the U.S. Army War College contribute to the development and eventual acceptance of the “Ends, Ways, Means” model?
4. What external influences in the global security environment, changes within the U.S. Army, and U.S. civilian policymaker policy guidance influenced the acceptance of Lykke’s “Ends, Ways, Means” model during the 1980s?
5. Is “Ends, Ways, Means” a useful model for the strategy-making needs of the U.S. Army and U.S. military today?

⁴ Among those who question “Ends, Ways, Means” are Jeffery W. Meiser, “Ends + Ways + Means = (Bad) Strategy,” *Parameters*, Vol. 46, No. 4 (Winter, 2016-17), 81-91; Gregory D. Miller, Chris Rogers, Francis J. H. Park, William F. Owen, and Jeffrey W. Meiser, “On Strategy as Ends, Ways, and Means,” *Parameters*, Vol. 47, No. 1 (Spring, 2017), 125-131; and Richard E. Berkebille, “Military Strategy Revisited: A Critique of the Lykke Formulation,” (*Military Review Online*, May 2018), 1-8.

Questions 1 and 2 will be answered in Chapter 2 by examining Colonel Lykke's testimony in front of the Senate Armed Services Committee on January 13, 1987 and in Lykke's article "Defining Military Strategy" published in the May 1989 issue of *Military Review*. Question 3 will be answered in Chapter 3 by looking at the change in course texts and syllabi in the U.S. Army War College's Course 2 of the resident program in the fall of 1982 and 1989. Question 4 will be answered in Chapter 4 by examining the major events of the time the period that led to the adoption of Lykke's formulation for strategy. Preliminary answers to Question 5 will be in the conclusion, both to serve as a synopsis of the findings of this thesis and to serve as the basis for future research by other scholars.

Assumptions

There are two assumptions. The first assumption is that published doctrine is the basis by which military officers solve military problems. Though in reality military officers each rely on a unique combination of intuition, education and experience when they confront a situation, I believe that these differences are distributed normally across the officer population, and that doctrine becomes the mean understanding. This assumption is necessary to make generalizations of how the "Ends, Ways, Means" model influences the thinking and behavior of U.S. military officers.

The second assumption is that the curriculum at the U.S. Army War College as explained in the syllabi and course texts are the ideas and readings taught in class. In other words, since recordings of the classroom are not available, this paper assumes that the range of instructors, students, and lessons generally followed the syllabi preserved in the archives. The assumption makes it possible to generalize what students learned.

Definitions

The purpose of defining strategy and strategic culture is to ensure that my understanding of strategy is clear to the reader and to provide a basis for evaluate how well Lykke's "Ends, Ways, Means" serves as a model for strategy.⁵

Strategy. Strategy is the conceptualization and communication of how an entity connects objectives to operations and vice versa. Strategy consists of an iterative and dynamic interaction between these two exogenous components along with an endogenous strategy formulation process that harmonizes the attainment of stated objectives with the expected utility of and feedback from operations. A strategy can include all components of a country's power including diplomatic, economic, military, demographic, and "soft" power.

Policy objectives are goals that rulers establish. These are established based on what the ruler believes are the interests of the country, the power that country has or can attain, and the costs the country is willing to accept. Rulers also identify these policy objectives by balancing interests — the overarching purpose for which an entity exists, such as life, liberty, and the pursuit of happiness in the United States — with political constraints. The number of rulers in a country depends on the form of government, though no matter the form the ruler is ultimately responsible to the people. For example, both an emperor who retains absolute power and an individual appointed as an executive in a government in the United States can establish political objectives. These rulers are

⁵ I developed and refined this understanding of strategy while a Strategic Studies student at the Johns Hopkins School of Advanced International Studies from 2014-2016. It is a synthesis of ideas and concepts from that program, particularly the readings and classroom discussions in Professor Marc Cesa's Strategy and Policy course at the Bologna Center in the Fall 2014 term.

subject to the control of the people because the emperor can be overthrown, and the individual appointee forced out of office if their party loses an election or if they are fired. An example of political objectives is the 2013 United Nations speech by former President Obama in which he established the five political objectives for the United States in the Middle East.⁶

Rulers may also delegate power to policymakers. Policymakers are subordinate to a ruler who wield some power or influence, typically for specific tasks or projects. Whom the ruler appoints as a policymaker, the degree of autonomy the policymaker receives, the relationship between the policymaker and the strategist, and the ability and circumstances of the strategist to communicate directly with the ruler are important considerations.

Strategy is distinct from and subordinate to policy. Clausewitz emphasizes this point in *On War*, noting that policy is “representative of all interests in the community” and is “laid down by governments.”⁷ Policy has supremacy over strategy and will “determine its character.”⁸ Policy will not, however, “extend its influence to operational details” such as the “posting of guards or the employment of patrols,” but will be “influential in the planning of war, the campaign, and often even of the battle.”⁹ Most importantly, Clausewitz warns that it is “highly dangerous” to allow the military to

⁶ Barack Obama, *Remarks by President Obama to the United Nations General Assembly* (Speech, New York: The White House Office of the Press Secretary, September 24, 2013), <https://obamawhitehouse.archives.gov/the-press-office/2013/09/24/remarks-president-obama-address-united-nations-general-assembly>.

⁷ Carl von Clausewitz, *On War*, edited and translated by Michael Howard and Peter Paret, (Princeton: Princeton University Press, 1989), 607-608.

⁸ Ibid., 608.

⁹ Ibid., 606.

influence policy.¹⁰ For Clausewitz, “theory . . . demands that at the outset of a war its character and scope should be determined.”¹¹ In practice, however, policy can change and, with it, the overall objective, the means available, or the manner permissible to achieve it. A strategy must adjust to and accommodate these changes in policy objectives. However, the reverse is not true: strategy may not necessarily change policy objectives.

Operations are the employment of tools of power to accomplish the policy objectives. People and organizations carry out policy and can do so at multiple levels. For instance, a strategy may require the use of a Carrier Strike Group, which consists of numerous smaller ships and units. The diffusion of operations to subordinate levels and groups can make keeping the overall objective difficult. In my opinion, keeping the overall objective clear is among the most important tasks of a strategist and requires deliberate communication of this objective at all levels of the organization.

Operations are also subject to limits imposed by rulers and strategists. For example, the strategy may include the deployment of a nuclear-capable bomber, but the ruler may restrict the use of nuclear weapons. People who conduct operations are operators. Example of operations are the use of a Special Operations Task Force, USAID’s Disaster Assistance Relief Team (D.A.R.T.), or a Peace Corps program in a country and operators for these are the servicemembers, employees and contractors, and volunteers who make things happen on the ground.

Strategy is also separate and distinct from operations. Operations are the carrying out of a strategy by subordinate elements. There is a temptation for both a ruler and a

¹⁰ Ibid., 609.

¹¹ Ibid., 584

strategist to become involved in operations. For the ruler, this is appropriate insofar as it ensures operations stay within political constraints. Typically, rulers who become overinvolved in operations do so only because of a lack of confidence in their strategists.¹² Strategists must strike a balance between managing communications between the ruler and the operators. To be overinvolved with one risks neglecting the other. To pay attention to neither is to render the strategist irrelevant.

Strategic Culture. Strategic culture is the endogenous strategy making process that is unique to the organization and culture of the strategist. Culture can be defined as “a set of evaluative standards (such as norms and values) and a set of cognitive standards (such as rules and models) that define what social actors exist in a system.”¹³ In the case of strategic culture, a group or culture will determine what makes a certain endogenous process. The appropriate dialogue between a ruler and the strategists and the proper control and interaction with subordinates carrying out operations are largely culturally based. In the United States, “Ends, Ways, Means” is the endogenous strategy making process.

Scope

The scope of this research is limited to the development of the “Ends, Ways, Means” model by Lykke between 1982 and 1989 and those events taking place in the

¹² See Eliot Cohen, *Supreme Command: Soldiers, Statesmen, and Leadership in Wartime*, (New York: The Free Press, 2003). Cohen uses four case studies to show instances where the commander-in-chief’s close management of operations led to better results in war.

¹³ Peter J. Katzenstein, “Introduction: Alternative Perspectives on National Security,” in *The Culture of National Security: Norms and Identity in World Politics*, ed. Peter J. Katzenstein, (New York: Columbia University Press, 1996), 6.

1980s that most directly influenced the acceptance of Lykke's model by 1989. Though there are some conclusions that connect the implications of this analysis to the present day, the research did not closely examine the intervening time period between 1989 and the present day.

Limitations of the Study

Despite tremendous support from the Art of War Scholars program and especially the Ike Skelton Distinguished Chair for the Art of War, Dr. Dean A. Nowowiejski, the class attendance policies at the U.S. Army Command and General Staff College and personal and professional obligations, limited my archival research and interview opportunities.

Significance of the Study

Based on the archival material used and the interview with Colonel Lykke, it is my belief that this is first history of the "Ends, Ways, Means" framework. By examining the framework's history, development, and dissemination the study will contribute to the larger discussion on how the U.S. military can be more effective at making strategy and harmonizing political objectives and military operations.

CHAPTER 2

ENDS, WAYS, MEANS: THE DEVELOPMENT OF THE LYKKE MODEL

When Army Colonel Art F. Lykke, Jr. arrived at the U.S. Army War College in the summer of 1976, he expected to serve the remaining eight years of his active duty career in the pleasant confines of Carlisle Barracks, Pennsylvania before easing into retirement.¹⁴ A graduate of the U.S. Military Academy, Fort Leavenworth's Command and General Staff College, and with distinguished service as a field artillery battalion commander in Vietnam and Cambodia, Colonel Lykke's absence from the Colonel's Command List was the first indication to him that his otherwise successful military career would soon end. Inspired to teach by his father, an educator, and MAJ John Eisenhower, his plebe year English teacher and son of President Dwight D. Eisenhower, Lykke used his personal network to secure a teaching position at the U.S. Army War College. Lykke viewed the opportunity as a way to give back to the Army by shaping the next generation of Colonels and future Generals while simultaneously preparing himself and his family for life in the civilian world. If Colonel Lykke thought his years in the Army were drawing to a close, then a meeting with Colonel Harry Ball, head of the Department of Strategy, changed his mind. Rather than fading into retirement, Ball told Lykke that over the remaining years of service Lykke needed to rethink how to teach strategy to Army War College students.¹⁵

Lykke was not a U.S. Army War College graduate. Instead, he received credit for senior service college as an Army fellow at Stanford. Though his Stanford thesis was

¹⁴ Arthur F. Lykke, Jr., interview by author, Carlisle, PA, February 21, 2019.

¹⁵ Ibid.

respectable enough for publication in the U.S. Army War College's *Parameters* journal, the time at the Stanford did not expose Lykke to Carlisle's year-long academic program designed to change Army Colonels into strategic leaders.¹⁶ To begin the rethink of teaching strategy, Lykke began by auditing classes, attending lectures, and participating in as many of the optional roundtable discussions as if he were a student. He also spent a great deal of time in the War College library pouring through classical works of strategy along with contemporary political science journals. From Clausewitz to Sun Tzu, Thucydides to Liddell Hart, Lykke read anything he could get his hands on, all with the knowledge that he would soon condense this into a six-week course. Unfortunately, the more Lykke read, the less he thought he would be able to distill his readings into a new approach to strategy as Colonel Ball demanded. But with the deadline looming, one night it all came together for Lykke in a dream:

¹⁶ Arthur F. Lykke, Jr. "Changing Power Relationships in the Pacific," *Parameters*, January 1, 1972, 22-36.

A MODEL FOR MILITARY STRATEGY



Figure 1. Lykke's Strategy Stool

Source: Arthur F. Lykke, Jr., "Towards a Theory of Military Strategy," in Arthur F. Lykke, Jr., ed. *Military Strategy: Theory and Application*, (Carlisle Barracks, PA: U.S. Army War College, 1989), 6.

The image Lykke says he saw in the dream became a rushed sketch in the middle of the night (see figure 1). Though the terms and concepts evolved, in ten years' time the image that appeared to Lykke in that dream would be how the U.S. military would think about, understand, and evaluate strategy.

How Arthur Lykke went from an unknown instructor at the U.S. Army War College with no formal historical, strategy, or theory-producing training developed the U.S. military's theory of strategy involves overcoming resistance by his peers on the U.S. War College faculty, and rejection by two prominent professional military journals.¹⁷ Lykke's model gained traction for three reasons. First, as the editor of the *Military Strategy: Theory and Application* course reader for the War College, Lykke presented his model to Army War College students by assigning it as required reading. Second, Lykke benefited from remaining on the War College faculty as a civilian professor after retiring from the Army in 1984. Third, Lykke developed a short, well-rehearsed briefing of his model complete with slides. The combination of these three factors meant that at an institution that "educates and develops leaders for service at the strategic level," but also has significant turnover in students, faculty, and leadership, Lykke became the go-to person for strategy.¹⁸

Lykke emerged as an expert outside of the U.S. Army War College mainly because of two events. First, he testified as an expert witness at a special hearing of the

¹⁷ Lykke, interview. According to Lykke the *Parameters* editorial board rejected his article "Towards an understanding of Military Strategy" in approximately 1981 because the editors did not accept his model nor did they believe that Lykke had an established expertise in the subject. Shortly thereafter, *Military Review* rejected the article, a fact they acknowledged in 1997 when they reprinted Lykke's "Defining Military Strategy" that appeared in the May 1989 edition of the magazine. See: Note from the editor in Arthur F. Lykke, Jr. "Defining Military Strategy," *Military Review*, January/February 1997, 183. Though the editor's note in 1997 does not specify why *Military Review* rejected Lykke's article, according to Lykke the editor at the time told him that an article about strategy would not be of interest for the magazine's readership.

¹⁸ U.S. Army War College, *Parameters*, vol. 46, no.3 Autumn 2016, inside back cover.

Senate Armed Services Committee in January 1987.¹⁹ Second, the editors of *Military Review* published his theory of strategy as an article in May 1989 and reprinted it again in June 1997.²⁰ Examining these two events not only shows Lykke's theory of strategy in its most developed form, but also shows how others responded to Lykke's theory before it became accepted.

Testimony before the Senate Armed Services Committee.

Shortly after taking over as the Chairman of the Senate Armed Services Committee, Senator Samuel Nunn (D-Georgia) made it clear that he intended to use his position to refocus the Senate and the Department of Defense on the "fundamental issues of national defense."²¹ Expressing concern about the "clarity, coherence, and consistency of our current strategy," Senator Nunn called a series of hearings to subject the Reagan-era military strategy to expert analysis.²² In preparation for these hearings, Nunn's staff assembled thirty-two witnesses to testify in sixteen panels over nearly four months to provide the committee with the intellectual tools to think about strategy and apply those

¹⁹ Lykke, interview. According to Lykke, he received an invitation after the U.S. Army War College Commandant told him to give his strategy brief to Anthony Punaro, a Senate Staffer working for Senator Samuel Nunn (D-Georgia) in December 1986.

²⁰ Arthur F. Lykke, Jr. "Defining Military Strategy," *Military Review*, January/February 1997, 183; Arthur F. Lykke, Jr., "Defining Military Strategy," *Military Review*, May 1989.

²¹ *Hearing Before the Senate Armed Services Committee*, National Security Strategy, day 2, 100th Cong., 1st Session (1987) (opening statement of Senator Sam Nunn, Chairman), 2. Hereafter referred to as Nunn Statement.

²² Nunn Statement, 3.

tools to evaluate Reagan-era defense spending.²³ Of these witness, Lykke testified third, the day after Secretary of Defense Caspar Weinberger, immediately after former National Security Adviser Zbigniew Brzezinski, and as the first speaker on a four-member panel with representatives from the other senior service war colleges.²⁴ With such a prominent speaking spot, Lykke's testimony offered the potential for the "Ends, Ways, Means" theory of strategy to influence both his panel and the Senate Armed Services Committee's later discussions and hearings.

In his opening statement introducing the panel, Senator Nunn explained that the purpose of having panelists from each of the four war colleges was to "help to educate the members of the Armed Services Committee and stimulate [their] thinking in the difficult but fundamental aspect of national security policymaking."²⁵ Senator Nunn asked the panelists that in their testimony they "cover any intellectual gaps . . . in our strategic planning" with a particular emphasis on "how should we think about strategy, why has so little attention been paid for so long to the strategy of the United States during all administrations, Democratic and Republican, and how do we best translate strategic

²³ *National Security Strategy: Hearings Before the Senate Armed Services Committee*, 100th Cong., 1st Session (1987), iii-v.

²⁴ The other panelists were Dr. Bob Wood, Dean of the Center for Naval Warfare Studies of the Naval War College, Colonel Denis Drew, Director of the Air Power Research Institute at the Air University, and Mr. Greg Foster, Senior Fellow at the National Defense University. *National Security Strategy: Hearings Before the Senate Armed Services Committee*, 100th Cong., 1st Session (1987), iii.

²⁵ *Hearing Before the Senate Armed Services Committee*, National Security Strategy, day 2, 100th Cong., 1st Session (1987) (Statement of Col. Arthur F. Lykke, Jr. USA Ret, Professor of Military Strategy, U.S. Army War College), 131-132. Hereafter referred to as Lykke Statement.

concepts into the resource priorities and defense policies.”²⁶ Senator Nunn allowed each panelist to make brief opening remarks, with each panelist also submitting a more detailed written statement for the record. Unlike his fellow panelists whose written statements expanded upon their oral comments and connected them to the programs at their respective colleges, the written statement Lykke submitted was the most recent draft of his article “Towards an Understanding of Military Strategy” and was not directly connected to the ideas Lykke spoke about in his testimony.²⁷

Testifying first on the panel, Lykke understood that his presentation would frame the discussion for the senators and his fellow panelists.²⁸ Instead, Lykke did not receive any substantive follow-up questions and Lykke did not participate in the free-flowing question-and-answer period that followed the opening statements. Part of this can be explained by constraints placed on Lykke’s testimony by senior U.S. Army leaders who asked that Lykke not speak about current Army operations and programs.²⁹ The failure of Lykke’s model to influence the hearing was also because Lykke’s testimony revealed

²⁶ Lykke Statement, 132.

²⁷ Ibid., 140-145. This will be examined later in the chapter when looking at Lykke’s “Defining Military Strategy” article.

²⁸ Lykke, interview. Lykke told me that he testified first because he was the only person the Senate Armed Services Committee wanted to have testify but that the services insisted that they have a representative testify, too. Later in the interview Lykke told me he may have testified first because his presentation included slides and required the dimming of the committee room lights.

²⁹ Ibid. Lykke said that when the U.S. Army staff found out that Senator Nunn asked Lykke to testify, “one of the Thurman brothers” flew to Carlisle Barracks to find out what Lykke intended to say. Lykke promised that he would stick to his presentation. Though Lykke did not remember which Thurman brother visited him, it was most likely General Maxwell R. Thurman who was serving as the Army Vice Chief of Staff at the time, not his brother retired Lieutenant General John R. Thurman, III who retired in 1979.

fundamental problems with Lykke's "Ends, Ways, Means" theory of strategy, raised questions about the consistency of his understanding of strategy with the thinkers he cited, and showed disagreements with the other panelists from the other senior service colleges.

What Lykke said in his testimony before the Senate Armed Services Committee showed several problems in the terminology and logic of Lykke's "Ends, Ways, Means" model. Lykke began his testimony by stating that over the course of his first ten years teaching at the U.S. Army War College the lack of precise terminology led to confusing discussions and he hoped that his testimony would correct this.³⁰ Unfortunately, Lykke did not do so. Using a projector and slides, Lykke defined common terms and definitions including national interest, the elements of national power, the elements of national strategy, national strategy, and military strategy, using Army and Joint publications.³¹ One of the failures was Lykke's failure to define the term strategic. Lykke noted strategic was "perhaps the most overly used and misunderstood term in the defense lexicon" that the Army War College "urge[s] it[s] students to be very specific" when using it, though he did not offer a definition or example of its proper use.³² In the rest of the testimony, his fellow panelists used "strategic" dozens of times, with slightly different meanings.

Lykke also introduced new terms and definitions to the discussion including the terms ends, ways and means which Lykke described as military objectives, military strategic concepts, and military means. Each of these were problematic. Military

³⁰ Lykke Statement, 132-133

³¹ Ibid., 132-136.

³² Ibid., 136.

objectives, according to Lykke were “a specific mission or task to which military efforts and resources are applied.”³³ In his comments explaining the slide, Lykke added that “when the military gets political guidance, they must translate it into feasible, doable military objectives.”³⁴ In his slideshow Lykke provided a sample listing of military objectives such as “deter war” and “defend U.S. territory” and in his oral comments he emphasized that “ends” explained “*what* we are trying to do not how.”³⁵ The problem with this definition is that by defining ends in solely military terms, Lykke ignored the fact that the military could be required by political leaders to pursue non-military objectives. This restrictive definition of strategy put Lykke at odds with most of the classical strategy thinkers and with American historical experience.³⁶

Lykke then defined ways as military strategic concepts. To Lykke, “the military course of action accepted as the result of the estimate of the strategic situation . . . is where the *how* comes in” and is synonymous with strategic concept.³⁷ The problem with this is twofold. First, the terms course of action and strategic concepts are not synonymous. The estimate of the situation is a process that determines the specific

³³ Ibid., 138.

³⁴ Ibid.

³⁵ Ibid.

³⁶ Clausewitz, Sun Tzu, Thucydides, Svechin, Brodie and others note that states use military force for political purposes. According to Murray, Knox, and Bernstein in *The Making of Strategy: Rulers, States and War*, B.H. Liddell Hart is among the few who restrict strategy to military affairs only, Williamson Murray, MacGregor Knox, Alvin Bernstein, *The Making of Strategy: Rulers, States and War*, (New York: Cambridge University Press, 1995), 1. In Chapter 4 I argue that Lykke’s restrictive definition reflected the context of the 1980s U.S. Army.

³⁷ Lykke Statement, 138.

circumstances a commander faces.³⁸ In the U.S. Army, at the time, this estimate was based on joint doctrine.³⁹ Strategic concepts, are generalized approaches, sometimes developed in doctrine, and included ideas such as forward defense, strategic reserves, mobilization, assured destruction and show of force.⁴⁰ Second, the difference between strategic concepts and strategy was not clear from Lykke's testimony. As Lykke said in his testimony "some people call each of these [strategic concepts] strategies," but he did not build on this idea or refute it.⁴¹ By not doing so, Lykke raised the possibility that what Lykke thought of as a component of strategy is actually the strategy itself, creating a logical fallacy within the "Ends, Ways, Means" model.

Lykke also asserted but left unexplained the idea that strategic concepts could be combined to form strategy. By way of example, Lykke explained that "we may choose a concept of forward defense with forward basing and forward deployments" or "we may recognize in this day and age we need all the friends we can make in the world."⁴² Lykke did not elaborate on the combination of strategic concepts. More importantly, even though he earlier described in his testimony that "seldom to you find something that is

³⁸ Joint Chiefs of Staff, *JP 5-0: Joint Planning*, Appendix B.

³⁹ "Estimate of the Situation," Joint Chiefs of Staff Publication 1, *Dictionary of Military and Associated Terms*, (Washington: U.S. Department of Defense, 1979), Appendix A, 161-162.

⁴⁰ Lykke Statement, 138.

⁴¹ *Ibid.*, 138.

⁴² *Ibid.*

purely military in nature,” Lykke did not include non-military strategic concepts nor non-military aspects of military strategic concepts.⁴³

Finally, Lykke did not explicitly define ends or military resources, but instead used an example. The slide that Lykke used included “general purpose forces; strategic tactical and nuclear forces; reserve forces; allied forces; and manpower, materiel and money.”⁴⁴ Lykke did not expand on military resources beyond the slide in his testimony, though his written statement explains means as “instruments by which some end can be achieved” and later as “the military resources which determine capabilities.”⁴⁵ It is possible that Lykke and the committee members understood “means” as the resources then in existence, making further elaboration in the limited speaking time unnecessary.

In addition to problems of terminology, Lykke revealed in his testimony several logical problems in the “Ends, Ways, Means” model of strategy. The first problem was Lykke’s assertion that military strategy was a separate and distinct component of national strategy. This was a logical leap made by Lykke in his presentation. Lykke verbally defined national strategy as “a master plan for the use of the elements of power to secure the national interests” and that “military strategy is just one of the components of the national strategy.”⁴⁶ To do make the assertion that the elements of national strategy each required separate strategies Lykke simply modified his slides. He did so by first showing a slide with the “Elements of National Power” as being the five elements as

⁴³ Ibid.,133. This will be examined as part of the *Military Review* article.

⁴⁴ Ibid.,138-139.

⁴⁵ Ibid.,141-142.

⁴⁶ Ibid.,134.

defined in Army Field Manual 100-1: political, economic, technological, military, and socio-psychological and then introducing another slide that showed the “Elements of National Strategy” as consisting of the same five components.⁴⁷ There is no logical explanation for this and in Lykke’s testimony he merely argued that “by changing one word on that slide we have national strategy.”⁴⁸

Seeing a potential problem, Senator Nunn interrupted Lykke to clarify: “in other words, you take national strategy as the broad term encompassing all of the various components of national power and military strategy as one component of that.”⁴⁹ Lykke agreed with the Senator and acknowledged that another term for the concept of “national strategy” referred to by Senator Nunn was “grand strategy.”⁵⁰ As noted above, the problem with Lykke’s assertion that military strategy is separate and distinct is at odds with most of the classical works on strategy, even if it was the desired understanding of the U.S. Army in the 1980s.⁵¹

A second logical problem is Lykke’s belief that the “ends, ways, means” model worked for all of the other components of national strategy. Even though Lykke asserted that the construct “works for any type of strategy, technology, political and so forth,” his model as displayed on the slide and in his written statement only accounted for military

⁴⁷ Ibid., 133-134.

⁴⁸ Ibid., 134.

⁴⁹ Ibid.

⁵⁰ Ibid.

⁵¹ This reasons for this will be shown in more detail in Chapter 4.

strategy.⁵² Neither in his testimony nor his written statement did Lykke explain how the “ends, ways, means” model could be used by the other components of national strategy.

In addition to the problems of terminology and logic, Lykke’s testimony relied on questionable support from the famous strategy thinkers Lykke cited. Realizing that the simplicity of his “Ends, Ways, Means” theory and his lack of professional or academic qualification might undermine his position, Lykke sought to establish the validity of his model by calling “on some big hitters” including Maxwell Taylor, Herman Kahn, Henry Eccles, and Andrew Goodpaster.⁵³ Though Lykke quoted these four strategists on his slides in support of his theory, neither the evidence Lykke used in his testimony nor the available writings of these four strategists support this.

For retired U.S. Army General Maxwell Taylor, the existing record does not support Lykke’s assertion that Taylor believed strategy to be a three-way balance between ends, ways, and means. It also does not show that Taylor agreed with the separation of military strategy from national strategy. Throughout Taylor’s writings, there is an argument for the balancing of ends and means, with the result of that balance being the strategy itself.⁵⁴ He does not indicate a three-way balance as Lykke’s “Ends, Ways, Means” asserts. The closest the record shows of a balance between ends, ways, and

⁵² Lykke Statement, 137.

⁵³ Ibid. Lykke’s use of self-deprecation in his testimony may reveal is concerns about not being taken seriously by the panel. In one slide on page 139 of his testimony, Lykke quoted himself. Below his name is a sub-title that asked “What’s he know?”

⁵⁴ Maxwell D. Taylor, *The Uncertain Trumpet* (New York: Harper & Brothers, 1960) critiques the Eisenhower administration’s “New Look” policy, the pursuit of weapons systems by the American military services as the main discussion points of strategy, and particularly criticizes the Chairman of the Joint Chiefs and the Secretary of Defense for “steam-rolling . . . worth of the best traditions of Tamany Hall” 108.

means is that quoted by Lykke in his testimony. Asked “if during the Cuba missile crisis [General Taylor] had any special problem as far as formulating military strategy?” Taylor responded “no” because “the objectives were clear” and “the rest was just ways and means.”⁵⁵ This quotation does not indicate that Taylor believed in a three-way balance nor does the quotation that Lykke attributes to Taylor that “strategy consists of ends, ways, and means” indicate such a balance.⁵⁶

Taylor’s published books and speeches also do not show that he believed in the separation of military strategy from national strategy as Lykke’s “Ends, Ways, Means” model does. If anything, Taylor’s writing and speeches suggest that he believed the opposite. In *Swords and Plowshares*, for instance, Taylor explained that his relationship with Syngman Rhee was important for his success as Command of the Eighth Army in Korea and that of the sixty programs he oversaw as U.S. Ambassador to Vietnam “only nineteen were military.”⁵⁷ In a speech at the U.S. Army War College in 1970, General Taylor claimed that after the Bay of Pigs invasion President Kennedy explicitly asked the Joint Chiefs to include non-military considerations in their recommendations to him.⁵⁸ Given this evidence, it is not clear that Maxwell Taylor actually supported Lykke’s theory of strategy as Lykke claimed.

⁵⁵ Lykke Statement, 137.

⁵⁶ Ibid. This quotation is also present in Lykke’s “Defining Military Strategy” article and its origin will be examined more closely later in this chapter.

⁵⁷ Maxwell D. Taylor *Swords and Plowshares* (New York: W.W. Norton & Company, 1972), 143-147 and 339-347.

⁵⁸ Maxwell D. Taylor, “The International Challenge to U.S. National Strategy,” Speech to the U.S. Army War College Class of 1970, 29 April 1970, 14, Army War College Curriculum Papers: Maxwell Taylor, U.S. Army Heritage and Education Center, Carlisle, PA.

The use of Herman Kahn as a support for Lykke's theory of strategy was also problematic. First, Lykke did not cite the source of Kahn's quotation in either the slideshow or his testimony. Second, even though according to Lykke, Kahn considered strategy as consisting of three components, the quotation Lykke attributed to Kahn did not use the same terms as Lykke. Instead of ends, ways and means, Kahn used objectives, tactics, and means.⁵⁹ It is not clear from this quote if Kahn's tactics are the same as Lykke's strategic concept in either form or function. Third, rather than a three-way balance between these components, the quotation Lykke attributed to Kahn said the three interact in a "complex." It was not clear what this complex was, though.⁶⁰ Fourth, Lykke quoted Kahn as speaking about national strategy, not military strategy. Rather than supporting Lykke's understanding of strategy, these four problems undermines whether the physicist, nuclear strategist, and RAND analyst whose first boss at RAND could not tell if Kahn "was a genius or just crazy" viewed strategy in the same way as Lykke or not.⁶¹

The third "big hitter" whose authority Lykke called upon to support his theory of strategy was Henry E. Eccles. A long-time professor at the U.S. Naval War College and its "guru of strategy" according to Lykke, Eccles is perhaps best known for his focus on logistics in war.⁶² Eccles' writings were among the most used in Lykke's courses at the

⁵⁹ Lykke Statement, 137.

⁶⁰ Ibid.

⁶¹ Fred Kaplan, *The Wizards of Armageddon*, (New York: Simon & Schuster, Inc., 1984), 220-221.

⁶² Lykke Statement, 137; Henry E. Eccles, *Logistics in the National Defense*, (Harrisburg, PA: The Stackpole Company, 1959).

U.S. Army War College during the 1980s.⁶³ Contrary to what Lykke's claimed, Eccles' understanding of strategy did not lend support to strategy being a three-way balance. Instead, Eccles viewed strategy as dealing with "three interwoven essentials: objectives, effects desired; scheme, or plan; and the physical means, economics and logistics."⁶⁴ These are not the same as ends, ways and means. Additionally, Lykke did not explain what Eccles' addition of economics and logistics adds to physical means. In his book Eccles noted the importance of analyzing national and military objectives as separate components of strategy.⁶⁵ Though this seemed to align with Lykke's belief in the separation of military and national strategy, it was not clear based on the discrepancy in terms if Eccles agreed with Lykke's "Ends, Ways, Means" understanding of strategy.

The last strategist Lykke cited in his testimony was General Andrew Goodpaster who was an exceptionally well-respected officer, whose support alone may have legitimized Lykke's theory of strategy. The Eisenhower administration identified Goodpaster as a "brilliant military planner" and selected him for the Solarium Exercise as a Lieutenant Colonel.⁶⁶ After retiring as the Commander of NATO in 1974, Goodpaster returned to active duty as the West Point Superintendent in 1977 to help the Academy

⁶³ This is based on the presence of Eccles writings in the *Military Strategy* text that will be discussed in further detail in Chapter 3.

⁶⁴ Lykke Statement, 137.

⁶⁵ Henry E. Eccles, *Logistics in the National Defense*, (Harrisburg, PA: The Stackpole Company, 1959), 25.

⁶⁶ U.S. Department of State Foreign Relations of the United States, 1952-1954, Volume II, "National Security Affairs", part 1 of 2, 351.

recover from a massive cheating scandal.⁶⁷ In short, there was probably no military officer of such esteem as Goodpaster to support Lykke's theory. Unfortunately, however, General Goodpaster's quotation that "strategy covers what we should do, how we should do it, and what we should do it with" did not necessarily support Lykke.⁶⁸ In his oral testimony, though, Lykke added in his own words to Goodpaster's quotation: "strategy covers what we should do, *the ends, or military objectives*; how we should do it, *the ways, or strategic concepts*; and what we should do it with, the resources."⁶⁹ Presented in this way, it was unclear which ideas are Goodpaster's and which are Lykke's.

There are several problems with Lykke's reliance on these four strategists. The first problem is the quotes attributed to the strategists do not have citations. The lack of citations makes verifying the quotes difficult. Considering that each of these four strategists had an extensive record of publications, public speeches, and other statements, the lack of citations either on the slides or in Lykke's written statement for the record is problematic. Not being able to confirm the origins of the quotes undermines the support that these strategists have for Lykke's model, though based on the transcript of the hearing none of the Senators disputed Lykke's characterization of these strategists.

The second problem is that while each strategist viewed strategy as consisting of three components, none of the quotations attributed to them by Lykke (except Taylor) defined the three components in the same terms as Lykke. Kahn and Eccles used the term

⁶⁷ C. Richard Nelson, *The Life and Work of General Andrew J. Goodpaster* (New York: Rowman & Littlefield, 2016), 243-244.

⁶⁸ Lykke Statement, 138.

⁶⁹ Ibid.

⁶⁹ Ibid.

“objectives” explicitly. Taylor used the term “ends,” but referred to this as objectives when referring to the “Cuba [sic] Missile Crisis.”⁷⁰ These three strategists also implied that objectives are the tasks political leaders require the military to accomplish, not “feasible, doable military objectives” translated by the military as Lykke claimed.⁷¹ Goodpaster’s quotation, however, called this first component “what we should do,” which has a normative connotation and does not necessarily mean an objective or an end to be accomplished. While Lykke used “ways” synonymously with strategic concepts in his theory of strategy, Lykke quoted Taylor as simply saying “ways” without elaborating, Kahn said “tactics,” Eccles said “scheme, or plan,” and Goodpaster explained the same variable as “how we should do it.”⁷² Each of these is different than Lykke. Finally, though Lykke, Taylor, and Kahn all used “means” to describe the materiel to be employed, Goodpaster claimed means to be “what we should do it with” and Eccles added “economics and logistics” to the “physical means.”⁷³ The difference in these terms between Lykke and the strategists he cited is not just semantic. The difference in terms when combined with the lack of context for the selected quotation leaves open the possibility of significant substantive and conceptual differences in meaning, too.

The third problem is that even with the different terms used, none of the “big hitters” viewed the interaction of the three components in the same way that Lykke presented them in his model. Kahn saw his three components of strategy as interacting in

⁷⁰ Ibid., 137.

⁷¹ Ibid., 138

⁷² Ibid., 137-138.

⁷³ Ibid., 137-141.

a “complex” or “package.”⁷⁴ While he thought these three components needed to be analyzed during strategy formulation, he did not specify how one impacted the others. For Eccles, the three components were “interwoven,” meaning they interacted and overlapped but not that they were separate and distinct. For Goodpaster, there was no interaction among the elements; strategy simply “covers” all three.⁷⁵ Strategy may do so by ensuring that each are considered and addressed but that is not explicitly stated by Goodpaster. While Taylor explained the interaction as a balance with the objectives needing to be balanced by something, it is unclear if he meant this as a tripolar balance of ends, ways, *and* means or a bipolar balance of ends on one side and ways and means on the other. Taylor’s writings and other speeches seem to indicate the latter, while Lykke’s quotation indicated the former when Taylor supposedly spoke at the U.S. Army War College in 1981.⁷⁶ What each “big hitter” strategist thought of the relationship between the components of strategy is not clear from Lykke in his testimony. What is clear, though, is that there was considerable differences between how the strategists viewed the interaction of the components of strategy. It is also clear that none of the “big hitters” viewed the strategy formula as Lykke does: the sum of three separate and distinct components.⁷⁷

⁷⁴ Ibid., 137

⁷⁵ Ibid., 138.

⁷⁶ Neither an examination of the available primary source record nor an interview with Lykke in February 2019 provided further information on Taylor’s supposed trip to the War College at any point in 1981. The only record found of Taylor speaking at the War College are for a speech given in 1970 for which a transcript remains. In this speech, Taylor did not speak about “Ends, Ways, and Means” and characterized strategy as significantly different. This is discussed later in this chapter.

⁷⁷ Lykke Statement, 137.

If Lykke intended his testimony and presentation to establish common terminology and conceptual understanding for the other panelists, then subsequent testimony by his colleagues from the other senior service colleges showed that Lykke was not successful. In their testimony none of the other panelists adopted Lykke's terminology and the testimony of each of the other panelists also showed significant disagreements with Lykke's "Ends, Ways, Means" theory of strategy.

Though he initially agreed with Lykke that "clearly defining and linking objectives, concepts, and means are central to strategy development," Dr. Robert S. Wood of the Naval War College clearly believed that the Lykke model was insufficient for strategy formulation for five reasons. First, Wood rejected that ends were usually clearly defined and instead argued that policy "reflects all of those interests, values, assumptions, principles and guides to action."⁷⁸ This was in sharp contrast to Lykke's description in "Ends, Ways, Means" which required a clear end before the military developed a strategy.⁷⁹ Second, Wood agreed with Lykke that strategy "entails an interlinked set of concepts" to "relate ends to means," he disagreed with Lykke's argument that ways are a component of strategy.⁸⁰ Instead, Wood argued that "strategy must go considerably beyond . . . generalized concepts" such as those recommended by Lykke and instead develop "an array of operational alternatives and campaign options

⁷⁸ *Hearing Before the Senate Armed Services Committee, National Security Strategy*, day 2, 100th Cong., 1st Session (1987) (Statement of Dr. Bob Wood, Dean of the Center for Naval Warfare Studies, Naval War College), 146. Hereafter referred to as Wood Statement.

⁷⁹ Lykke Statement, 138.

⁸⁰ Wood Statement, 146.

sensitive to different situations and dynamic change.”⁸¹ Third, Wood disagreed with Lykke that military strategy was a subsidiary component of national strategy. Instead, Wood insisted that “any point on the spectrum [of conflict] requires that we bring to bear the relevant panoply of national capabilities from psychological to economic to cultural to military instruments.”⁸² Fourth, after discussing the development of a unique American strategic culture, Wood explained that in order to work within this culture “strategy must not only link in some general sense resources to ends, but it must also provide the conceptual basis for developing and exercising a variety of operations for campaign options.”⁸³ Fifth, Dr. Wood used his written statement to provide a detailed explanation of the Naval War College’s approach to teaching strategy to its students.⁸⁴ In so doing, Wood showed that the Naval War College’s understanding of strategy was much more dynamic and its graduates better prepared to form strategy when things were not so clear as Lykke implied.

Air Force Colonel Dennis Drew used his testimony to show that “Ends, Ways, Means” left out understanding the nature of the conflict as an important piece of the

⁸¹ Ibid., 147-148.

⁸² Ibid., 146.

⁸³ Ibid., 147.

⁸⁴ Ibid., 149-154. For example, Wood used his written statement submitted for the record to show such details as the size of the school, the main features of the curriculum, and specific resources and programs unique to Newport such as war gaming for all four military services, along with Ambassadors and foreign Admirals. This contrasted markedly with Lykke, whose lack of advocacy for the U.S. Army War College he tried to remedy in his follow-up letter to the Senate Armed Services Committee. See: *Hearing Before the Senate Armed Services Committee*, National Security Strategy, day 2, 100th Cong., 1st Session (1987) (Thoughts on Framework for Strategy Hearings of Col. Arthur F. Lykke, Jr. USA Ret, Professor of Military Strategy, U.S. Army War College), 209-210.

strategy “stew.”⁸⁵ Drew explained that Lykke’s model failed at the extreme ends of the spectrum of conflict where the “nature of warfare influences all three of the elements of strategy.”⁸⁶ Because revolutionary wars required “coordination of the instruments of power . . . right down to the battlefield itself” and “specialized training, unique operational strategies, and perhaps modified equipment,” Lykke’s model would not work.⁸⁷ In the event of nuclear war, Drew explained the dilemma for strategy was the “lack of empirical data on which to base strategy decisions,” making strategy by Lykke’s model difficult if not impossible.⁸⁸ In concluding his testimony that “there are few constants, innumerable variables, many unknowns, and no perfect answers” in war, Drew argued that the Lykke model was too simple and only partly useful.⁸⁹

Mr. Greg Foster of the National Defense University presented a five-point rejection of Lykke’s model. First, Forster argued against Lykke’s attempt to show a consensus regarding the term strategy. Where Lykke tried, in his testimony, to connect “Ends, Ways, Means” to Taylor, Kahn, Eccles, and Goodpaster, Foster argued that no such consensus existed within the national security community.⁹⁰ Second, he argued that

⁸⁵ *Hearing Before the Senate Armed Services Committee*, National Security Strategy, day 2, 100th Cong., 1st Session (1987) (Statement of Colonel Denis Drew, Director of the Air Power Institute, Air University), 155. Hereafter referred to as Drew Statement.

⁸⁶ *Ibid.*, 156.

⁸⁷ *Ibid.*

⁸⁸ *Ibid.*

⁸⁹ *Ibid.*, 156 and 158.

⁹⁰ *Hearing Before the Senate Armed Services Committee*, National Security Strategy, day 2, 100th Cong., 1st Session (1987) (Statement of Mr. Greg Foster, Senior Fellow, National Defense University), 158. Hereafter referred to as Foster Statement.

Lykke's model was that of a group of "traditionalists" who "tend to see strategy as being merely an instrumentality of policy" and only as military strategy as a component of national strategy.⁹¹ Instead, Foster argued that "in the modern era strategy can only be viewed as grand strategy—the coordinated direction of *all* elements of power at the Nation's disposal."⁹² Third, he argued against the strategic, operational and tactical levels as the appropriate taxonomy of war relevant for discussions regarding strategy.⁹³ Instead, Foster argued that the nature of war in the modern world "tends to negate any meaningful distinction that might have been made in earlier times between strategy and tactics" and that the appropriate taxonomy for the committed was between "strategy, policy, and programs."⁹⁴ Fourth, Foster argued that to accept the traditionalist view the committee would "run a very acute risk of allowing the debates . . . to devolve as they have in the past, into discussions of programmatic detail" which is exactly what Senator Nunn said he wanted to avoid.⁹⁵ Finally, Foster refuted Lykke's use of Eccles in support of "Ends, Ways, Means" because according to Foster, Eccles defined strategy as 'the comprehensive direction of power to control situations and areas in order to attain objectives.'⁹⁶ The implication of this, Foster continued, was that Eccles rejected the distinction between military and national strategy because strategy required all elements

⁹¹ Foster Statement, 159.

⁹² Ibid.

⁹³ Ibid.

⁹⁴ Ibid., 159 and 164.

⁹⁵ Ibid., 159.

⁹⁶ Ibid., 166

of national power working together to “exploit adversary weakness.”⁹⁷ Sweeping aside the differences in opinion by Lykke, Wood, and Drew as slight variations of what he termed a “traditionalist” viewpoint, Foster described the “Ends, Ways, Means” model as invalid, the taxonomical differentiation irrelevant, and Lykke’s over-simplification of strategy fundamentally flawed.

Three criticisms united all of the panelists against Lykke’s “Ends, Ways, Means” model. First, they rejected the separation of military and national strategy and argued that strategy could not view the military component of power in isolation from the others as Lykke’s “Ends, Ways, Means” model did. Second, they believed that Lykke oversimplified strategy. To Wood, Lykke’s model did not present a variety of options to policymakers. For Drew, the model did not take into account an understanding of the enemy, especially one fighting a total war against a United States fighting a limited one.⁹⁸ For Foster, Lykke’s was a simplified model of strategy that worked only when fighting a war where other elements of power were “adjuncts to military operations.”⁹⁹ Third, Lykke’s fellow panelists believed that objectives would change in war. This meant that Lykke’s requirement that policymakers set ends ahead of time was not realistic. In short, where Lykke attempted to establish “Ends, Ways, Means” as a universal approach to strategy in his Senate testimony, his fellow panelists thoroughly rejected it with their testimony.

⁹⁷ Ibid.

⁹⁸ Ibid.,156.

⁹⁹ Ibid.,164.

When each of the panelists finished their testimony, the hearing moved to a question and answer period with Senators asking questions and the panelists responding. If the Senators or panelists found Lykke convincing, they might have used Lykke's model or terminology. Neither the Senators nor the panelists did. Additionally, Lykke could have used his model to answer the broad questions asked by the Senators such as "what the Soviet grand strategy is and how they hope to prevail given only basic strength that they have[?]"¹⁰⁰ Instead, Lykke remained silent. There are two explanation for Lykke's this. First, while Lykke felt comfortable when presenting his well-rehearsed slides, he was not comfortable in rapid back-and-forth discussions such as the public hearing.¹⁰¹ Second, Lykke promised U.S. Army leaders ahead of time that he would only present his slides and not discuss current Army policy.¹⁰² This limited Lykke's ability to engage in the discussion. The combination of the other panelists rejecting "Ends, Ways, Means" and the limits on Lykke's testimony meant that Lykke and his model were absent from the remainder of the hearing.

Even though Lykke later stated that he thought the testimony went well, the Senate hearing revealed serious flaws in Lykke's "Ends, Ways, Ways" model and no one in the subsequent thirteen panels used Lykke's model as a basis for discussion.¹⁰³ Despite

¹⁰⁰ *Hearing Before the Senate Armed Services Committee*, National Security Strategy, day 2, 100th Cong., 1st Session (1987), 184.

¹⁰¹ Lykke, interview. The only part of the hearing Lykke remembered were the two questions Senator Nunn asked that all of the panelists think only in terms of military strategy when formulating an answer. Senate Armed Services Committee, *National Security Strategy*, 205.

¹⁰² Lykke, interview.

¹⁰³ *Ibid.*; *Hearing Before the Senate Armed Services Committee*, National Security Strategy, 100th Cong., 1st Session (1987), 210-1112.

this, the experience of testifying bestowed legitimacy on both Lykke and his understanding of strategy. Lykke emerged from the Senate Armed Services Committee room able to claim that he testified as a strategy expert.¹⁰⁴ This allowed him to finally get his “Ends, Ways, Means” model of strategy published in one of the U.S. military’s professional military journals.

“Defining Military Strategy”¹⁰⁵

Lykke’s model first appeared in print in the May 1989 issue of *Military Review*, a monthly professional journal of the U.S. Army. The article that *Military Review* published in 1989 was the latest version of Lykke’s “Towards an Understanding of Military Strategy” from the U.S. Army War College’s *Military Strategy* course reader and a slightly modified version of Lykke’s written statement for his Senate Armed Services Committee testimony.¹⁰⁶ It was also not much different from the article *Military Review* rejected in 1981.¹⁰⁷ The most substantial difference between the *Military Review*

¹⁰⁴ Arthur F. Lykke, Jr., “About the editor,” in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle, PA: U.S. Army War College, 1989), v.

¹⁰⁵ Arthur F. Lykke, Jr., “Defining Military Strategy,” *Military Review* 69, no. 5, (May 1989): 2-8.

¹⁰⁶ Arthur F. Lykke, Jr., “Towards an Understanding of Military Strategy,” in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr., (Carlisle Barracks: United States Army War College, 1981) 3-1 – 3-5; Lykke Statement, 140-145. Differences between the 1981 version of the article and the 1989 version will be discussed in Chapter 3. The Senate statement cited *Field Manual No. 100-1* when referring to the elements of power on 142.

¹⁰⁷ Lykke, “Defining Military Strategy,” *Military Review* 77, no. 1, (January/February 1997): 183-186. In a reprint of Lykke’s article, the *Military Review* editor admitted “records show that *Military Review* rejected this same article in March 1981 [because] according to Lykke, the editor believed that an article about strategy would be inappropriate for students at the Army’s senior tactical school.”

article and the previous versions was the changing of the title to “Defining Military Strategy.”¹⁰⁸

That *Military Review* published Lykke’s article instead of the U.S. Army War College’s *Parameters* journal is noteworthy for two reasons. First, the primary audience for *Military Review* are U.S. Army officers concerned with the tactical and operational levels of war, while *Parameters* is intended for senior-level officers and their staffs who are focused on the strategic level of war.¹⁰⁹ Lykke’s article explaining a model for strategy was more consistent with the U.S. Army War College’s journal rather than that of the U.S Army’s Command and General Staff College. Second, Lykke already had a relationship with *Parameters* which published his War College thesis about Asia.¹¹⁰ According to Lykke, the *Parameters* editorial board did not believe he had sufficient expertise in strategy despite the fact that he joined the U.S. Army War College faculty in 1976 and his model was the basis for the strategy curriculum beginning in 1981.¹¹¹ That an article about strategy appeared as the cover story for a periodical focused on the tactical and operational levels of war showed a shift at the Command and General Staff College and the growing importance of understanding strategy within the U.S. Army by the late 1980s.

¹⁰⁸ Lykke, interview. Lykke believed this change clarified the purpose of the article for the needs of *Military Review*’s readers.

¹⁰⁹ *Parameters*, inside back cover. According to the cover matter, the journal is to support the mission of the U.S. Army War College’s goal to “to produce graduates who are skilled critical thinkers and complex problem solvers in the global application of landpower” and “to also act as a ‘think factory’ for commanders and civilian leaders at the strategic level worldwide.”

¹¹⁰ Lykke, “Changing Power Relationships in the Pacific,” 22-36.

¹¹¹ Lykke, interview.

The publication of Lykke's article by *Military Review* was important for the acceptance of the "Ends, Ways, Means" model for three reasons. First, it allowed Lykke to present the "Ends, Ways, Means" model to a larger audience because it was the first time that it appeared in print outside of the U.S. Army War College's *Military Strategy* course reader and the *Congressional Record*. Second, *Military Review* affirmed Lykke as an expert by introducing him by his title "Professor of Military Strategy at the U.S. Army War College" and allowed Henry Gole a former Carlisle instructor to describe Lykke as a "master teacher at the U.S. Army War College" who "has translated commentaries on strategy — usually presented in turgid prose — into a back-of-the-envelope outline that permits the beginning of orderly strategic thinking."¹¹² This recognition by Lykke's peer further recommended him to the *Military Review* readers and solidified the perception of expertise. Third, *Military Review* rebuilt Lykke's "Ends, Ways, Means" model as an ancient Greek temple and put it on that issue's cover.

¹¹² Lykke, "Defining Military Strategy," 8; Henry G. Gole, "Friction, Fog, Fun, and Fiction," *Military Review* 69, no. 5, (May 1989):83.

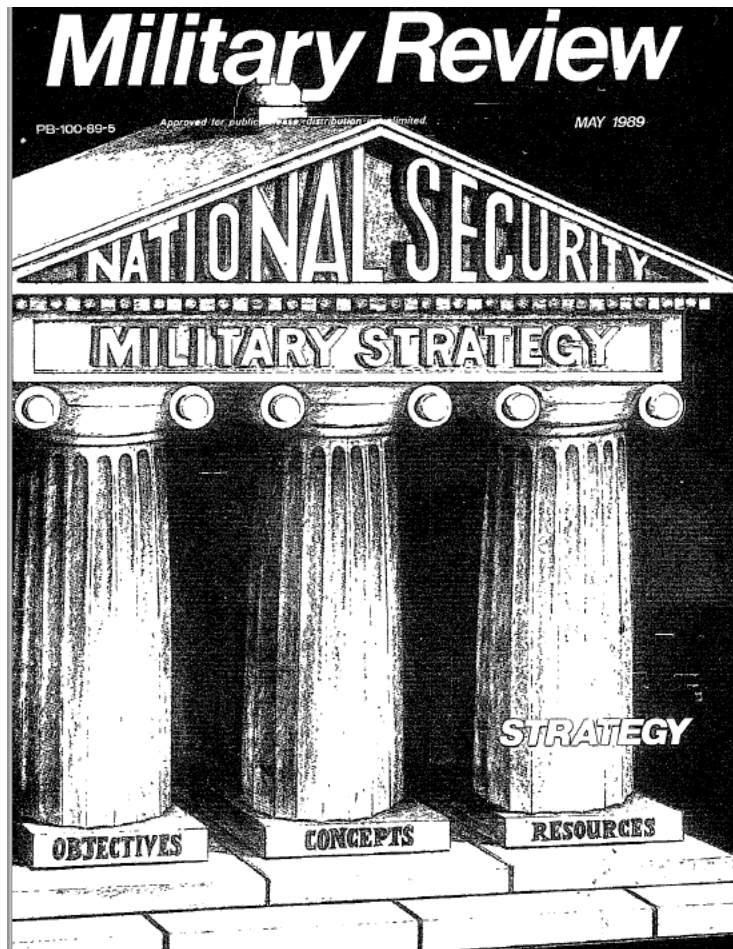


Figure 2. : Cover of *Military Review*, May 1989

Source: Arthur F. Lykke, Jr., “Defining Military Strategy,” *Military Review* 69, no. 5, (May 1989):3.

The cover’s design implied that Lykke’s model descended from ancient knowledge and, like a Greek temple, would endure.

While Lykke explanation of the “Ends, Ways, Means” model in his *Military Review* article showed many of the same problems already identified in the Senate testimony, it also revealed three further weaknesses with the “Ends, Ways, Means” model. The first weakness was Lykke’s claim that Maxwell Taylor first explained strategy as consisting of consisting of “ends, ways and means” in a speech at the U.S.

Army War College in 1981.¹¹³ Aside from Taylor's extensive record that showed a more nuanced understanding of strategy, Lykke's reliance of Taylor was problematic for two reasons.¹¹⁴ The first problem is that there is not a record of a trip by Taylor to the U.S. Army War College in 1981. Protocol records for similar trips by guest speakers during the same academic year show a file consisting series of preliminary letters between the College and the speaker, an official invitation, correspondence within the War College staff, a detailed itinerary, a designated escort officer, an office call with the Commandant, a meal with a seating chart, and a copy of the thank you note from the Commandant afterwards.¹¹⁵ As a retired four star General and former Ambassador, it is highly unlikely that Maxwell Taylor visited Carlisle without a protocol file to support it.¹¹⁶

The second problem is Lykke's reference in the *Military Review* article is the only record of Taylor's remarks. There is not a transcript of Taylor's remarks in 1981 as there was for a previous visit by Taylor to Carlisle Barracks in 1970.¹¹⁷ In the 1970 speech, the

¹¹³ Lykke, "Defining Military Strategy," 3. Of note, there is no comma between ways and means in the *Military Review* article.

¹¹⁴ See discussion of Taylor's extensive public record of books, statements, and speeches that show a different understanding of strategy than Lykke's "Ends, Ways, Means" model in the analysis of Lykke's Senate testimony above.

¹¹⁵ The protocol files for AY 1981 consisted of several large archival boxes with files for each of the War College's departments and with every guest speaker for even small classes with its own file. These included trips from civilian professors, civilians from Department of Defense agencies, and other General officers, including the Deputy Commanding General of Recruiting Command who invited himself to speak. There are no files showing a visit from Maxwell Taylor. Army War College Archives, Lectures AY 1981, 15 DEC 1978-5 JUN 1981, Box 1981-1. Further searches by the archivists did not find any additional protocol boxes.

¹¹⁶ Lykke, interview. Lykke did not remember a visit by General Taylor to Carlisle in 1981. This was one of the few details that Lykke did not remember.

¹¹⁷ Maxwell Davenport Taylor, "The International Challenge to U.S. National Strategy," Speech to the U.S. Army War College Class of 1970, 29 April 1970. In this

school recorded Taylor's remarks to the students and faculty and then provided a transcript, including the question and answer period.¹¹⁸ No such record exists for a speech by Taylor in 1981. The lack of a transcript means that even if Taylor's speech did occur as Lykke claimed, Lykke's description of what Taylor said is the only existing record of it.¹¹⁹ Lykke's reliance on the authority of Maxwell Taylor based on a visit that possibly did not happen and a speech for which there is no record makes it difficult to know if Lykke used Taylor correctly in the *Military Review* article. When combined with Taylor's known writings and speeches that contradict Lykke's understanding of strategy, Lykke "Ends, Ways, Means" model of strategy does not have the support of Taylor.

The second weakness of the *Military Review* article was Lykke's failure to clearly develop the term "ways."¹²⁰ Though Lykke also failed to do so in the Senate hearing, the *Military Review* article showed three further problems. First, Lykke did not clearly define the term "ways."¹²¹ Instead, Lykke used several different descriptions of ways including "courses of action," the "various methods of applying military force," the "examination of courses of action designed to achieve the military objective" and, finally, "military

speech Taylor explicitly rejected the separation of military from national strategy, as explained during the analysis of Lykke's testimony.

¹¹⁸ Ibid.

¹¹⁹ Lykke, "Defining Military Strategy," 3.

¹²⁰ Ibid., 4. Ways as used by Lykke was a new term not found in classical understanding of . To take one example of classical military thought, Clausewitz describes in Chapter 2 of *On War* the relationship of purposes (ends) and means. See Carl von Clausewitz, *On War*, 90-99.

¹²¹ Lykke, "Defining military strategy," 3.

strategic concepts.”¹²² Lykke did not explain the differences between these definitions. Second, even though Lykke claimed that “the determination of strategic concepts is of major importance” for strategy, Lykke once again did not explain the term strategic concept.¹²³ Lykke did claim that strategic concept is “the course of action accepted as the result of the strategic situation” and provided examples such as forward defense, collective security and security assistance but did not explain where strategic concepts come from, who develops them, and how to know whether a concept is well-developed or appropriate to a specific situation.¹²⁴ Presumably strategic concepts could be developed through doctrine, with strategists synthesizing strategic concepts based on the means provided or the objectives to be achieved. Unfortunately, if Lykke had this in mind for ways, he did not include it in his *Military Review* article. Third, Lykke claimed that ways “may combine a wide range of options, such as forward defense (forward basing and/or forward deployment), strategic reserves, reinforcements” that “can be used either unilaterally or in concert with allies,” but he does not explain how to do so.¹²⁵ As pointed out by Dr. Wood in his Senate testimony, a strategy formula that generated multiple options for strategy would be a good thing.¹²⁶ Unfortunately, however, Lykke did not develop the idea further. Given that Lykke’s addition of “ways” distinguished his model

¹²² Ibid., 3-4.

¹²³ Ibid., 6.

¹²⁴ Ibid.

¹²⁵ Ibid., 5-6.

¹²⁶ Wood statement, 147.

from others, his failure to develop the term when he had the change in the *Military Review* article left the critical component of his model undeveloped.

The third weakness with Lykke's *Military Review* article is the reduction of "Ends, Ways, Means" to the mathematical formula "strategy = ends + ways + means."¹²⁷ This created two problems. First, Lykke's simple formula created a problem of multicollinearity between ends and the combination of ways and means.¹²⁸ According to Richard E. Berkebile this "makes discerning the relative importance and effect of ends, ways, or means on the end state . . . difficult."¹²⁹ Second, this formula contradicts Lykke's own strategy stool. According to the formula in *Military Review*, strategy is the dependent variable that is the result of the interaction of the independent variables of ends, ways, and means.¹³⁰ In Lykke's three-legged strategy stool, a simplified version of which appeared in the *Military Review* article, strategy is the result of a tri-polar balance between military ends, military ways, and military means. Therefore, Lykke presented two formulas for strategy but did not explain the difference.

More importantly, neither formula Lykke presented in his *Military Review* article achieved the purpose of strategy which is to obtain an objective. In the first formula, the absence of any variable would not result in the failure of the strategy. In actuality, the absence of either an end, a way, or the necessary means would make any resulting strategy useless. In the second formula, the purpose of strategy is simply to achieve an

¹²⁷ Ibid., 2.

¹²⁸ Richard E. Berkebile, "Military Strategy Revisited: A Critique of the Lykke Formulation," *Military Review Online*, (May 2018), 3.

¹²⁹ Ibid.

¹³⁰ Lykke, "Defining Military Strategy," 2.

internal balance of military ends, military ways, and military means. While an internal balance of components may be desirable, it does not necessarily guarantee the strategy will achieve the objective required. Therefore, the logic of Lykke's strategy stool runs the risk of isolating war from its purpose, in contradiction to Clausewitz's warning.¹³¹

Despite the weaknesses of Lykke's argument in "Defining Military Strategy," Lykke's "Ends, Ways, Means" model of strategy aligned with other articles in the same issue of *Military Review*. First, *Military Review* editor Phillip W. Childress noted that the purpose for presenting strategy in the issue was to help readers in the "long, arduous process . . . that is required of each officer in the form of professional reading and self-study throughout his career."¹³² Lykke's "Ends, Ways, Means" provided a simple model in line with Childress' goal, especially when combined with Gole's introduction of Lykke.¹³³ Second, Colonel Michael Andrews showed in his article that he accepted many of Lykke's ideas.¹³⁴ Andrews described a fictional council of war overseen by President Lincoln shortly after Bull Run, "culminating in definitive military objectives" with which military leaders could develop a military strategy.¹³⁵ Andrews used this depiction to show

¹³¹ Carl von Clausewitz, *On War*, 87. Clausewitz says "the political object is the goal, war is the means of reaching it, and means can never be considered in isolation from their purpose." Berkebile uses an extended portion of the same section to argue that Lykke's "concept of a military strategy of military end state is too constrictive for application in the real world except in the most restrictive conditions approaching purely military traditional warfare between states." Berkebile, "Military Strategy Revisited," 4.

¹³² Phillip W. Childress, "From the Editor", *Military Review* 69, no. 5, (May 1989): i.

¹³³ Gole, "Friction, Fun, Fog, and Fiction," 83.

¹³⁴ Michael A. Andrews, "Modern Theory for Lincoln's Civil War Strategy," *Military Review* 69, no. 5, (May 1989): 48-55.

¹³⁵ *Ibid.*, 48.

that this “type of national command authority process is necessary in order to establish definitive objectives before committing military force” and showed the clear separation of national and military strategy that Lykke believed in.¹³⁶

Conclusion of the Lykke Model

Lykke’s testimony and his article in *Military Review* revealed significant weaknesses in Lykke’s “Ends, Ways, Means” model of strategy. First, Lykke did not consistently use clear terms and definitions in his testimony or his article. Second, Lykke tried but failed to show that his understanding of strategy aligned with those of better-known experts. He did so with quotations from these experts that lacked source information, seemed to be taken out of context, and which seemed to contradict the actual understanding of strategy by these experts. This was especially clear when Lykke tried to use these experts to support his idea that military strategy was a separate and distinct component of national strategy, rather than an integrated part. Third, the panelists from the other War Colleges who testified with Lykke each dismissed parts of Lykke’s understanding of strategy during their testimony. Fourth, Lykke did not sufficiently develop the concept of ways nor the logic of the two formulas that Lykke argued explained ends, ways, and means. The combination of these weaknesses made the validity of Lykke’s “Ends, Ways, Means” model of strategy questionable for all but the simplest of military problems. As pointed out by his fellow panelists, the “Ends, Ways, Means” model seemed appropriate for situations where the problem is primarily military, strategic concepts are well-developed, and the military means are those that are already available. As will be seen in Chapter 4, this is precisely the type of conflict the U.S.

¹³⁶ Ibid.

Army had in mind in the 1980s. The Lykke model is therefore more appropriate for solving problems at the tactical and operational levels of war, but not for problems at the strategic level.

CHAPTER 3

TEACHING STRATEGY AT CARLISLE IN THE 1980s

One of primary ways that Lykke influenced the teaching of strategy at the U.S. Army War College was as the editor of *Military Strategy: Theory and Application*, the “primary reference for the course on Military Strategy” at the U.S. Army War College.¹³⁷ As the editor of the five editions published during the 1980s, Lykke supervised a small administrative staff, but retained full editorial authority from selection of articles to final publication.¹³⁸ Unlike previous editions of *Military Strategy* which used articles written by U.S. Army War College students and faculty, Lykke included selections from peer-reviewed journals and books.¹³⁹ In addition to copies for U.S. Army War College students, the Army War College sent copies to other Army libraries including West Point and Fort Leavenworth.¹⁴⁰

Over the course of the 1980s, Lykke tried to use his position as the editor of *Military Strategy* to make “Ends, Ways, Means” the basis for how the U.S. Army thought

¹³⁷ Arthur F. Lykke, Jr. *Military Strategy: Theory and Application*, (Carlisle, Barracks, PA: U.S. Army War College, 1989), vi.

¹³⁸ Lykke, interview. Lykke explained that taking the final draft to the publishers felt like carrying a newborn baby home from the hospital. Though Lykke did not recall a page limit, each of the five editions in the 1980s contained between 410 and 440 pages.

¹³⁹ William M. Whitesel, and Wilmer F. Cline, 1973, *Military Strategy: Studies in Military Strategy*, (Carlisle Barracks, PA: U.S. Army War College, 1973); Arthur F. Lykke, Jr. *Military Strategy: Theory and Application*, (Carlisle, Barracks, PA: U.S. Army War College, 1982); Arthur F. Lykke, Jr. *Military Strategy: Theory and Application*, (Carlisle, Barracks, PA: U.S. Army War College, 1989);

¹⁴⁰ At the time of the completion of this thesis, Fort Leavenworth’s Combined Arms Research Library circulating books included the 1982, 1985, and 1989 editions; West Point had three copies of the 1982 edition; and the Army Heritage Education Center archives in Carlisle, Pennsylvania had all five editions available to researchers.

of strategy. According to the 1982 edition, Lykke intended for the book to “originate within the U.S. Army the nucleus of a new corps of military strategists.”¹⁴¹ In 1989, Lykke eliminated the word “new,” indicating the extent to which he believed “Ends, Ways, Means” permeated the thinking of the U.S. Army.¹⁴² Comparing the 1982 and 1989 editions of *Military Strategy* by the diversity of content, the prominence of Lykke’s writings, and the number of strategic concepts shows the extent to which Lykke used *Military Strategy* to establish “Ends, Ways, Means” as the dominate strategy model at the U.S. Army War College.

The 1982 Edition of *Military Strategy*

The 1982 edition of *Military Strategy* was Lykke’s first effort to consolidate most of the readings for the U.S. Army War College’s “National Security Policy: War, Politics, Power and Strategy” course into one volume.¹⁴³ Though students also read portions of Clausewitz’s *On War*, Weigley’s *The American Way of War*, Earle’s *Makers of Modern Strategy*, and had a three-volume set of supplementary readings, the readings in *Military Strategy* were the primary readings for classroom seminar sessions.¹⁴⁴

¹⁴¹ Arthur F. Lykke, Jr., “Introduction,” in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr., (Carlisle, Barracks, PA: U.S. Army War College, 1982), 1-1. Hereafter, Lykke, *Military Strategy*, (1982).

¹⁴² Arthur F. Lykke, Jr. *Military Strategy: Theory and Application*, (Carlisle, Barracks, PA: U.S. Army War College, 1989), vii. Hereafter Lykke, *Military Strategy*, (1989).

¹⁴³ Lykke, *Military Strategy*, (1982), 1-1.

¹⁴⁴ U.S. Army War College, *Common Overview: Course 2 War, Politics, Power and Strategy*, (Carlisle Barracks, PA: U.S. Army War College, 1982). The books on the syllabus were Carl von Clausewitz, *On War*, edited and translated by Michael Howard and Peter Paret, (Princeton: Princeton University Press, 1976); Russel F. Weigley, *The American Way of War: A History of United States Military Strategy and Policy* (New York: Macmillan Publishing Co., Inc. 1973); and Edward Mead Earle, ed., *Makers of*

Lykke began work on the 1982 edition of *Military Strategy* in November 1981 and had the 411 page edition ready for the U.S. Army War College Commandant's signature on May 11, 1982.¹⁴⁵ The lack of complete footnotes and bibliographic information for some of the articles, incomplete biographies of the authors, and insufficient introductions make the 1982 edition sloppy and may be indicative of Lykke's inexperience as an editor.¹⁴⁶ Despite these issues, Lykke included diverse perspectives on strategy, did not emphasize his own articles, and developed a range of strategic concepts. What is clear from the 1982 edition is that Lykke's "Ends, Ways, Means" model did not dominate the teaching of strategy at the U.S. Army War College.

The first distinguishing feature of the 1982 edition of *Military Strategy* is that Lykke provided diverse perspectives on strategy, including authors whose ideas contradicted his own. Lykke did so in two ways. First, Lykke included one chapter consisted of four articles on the evolution of strategy. Maurice Matloff presented a sweeping history of American military thought and helped students "to consider what factors influenced [American strategy's] development, what forms it has assumed, and in what sense it has succeed or failed."¹⁴⁷ The former Chief of Army History, Matloff

Modern Strategy: Military Thought from Machiavelli to Hitler, (Princeton: Princeton University Press, 1943).

¹⁴⁵ Lykke, *Military Strategy*, (1982), iii, v; Lykke, interview. According to Lykke, the Commandant's signature was a formality and the Commandant did not choose to influence the content of the *Military Strategy* in any way.

¹⁴⁶ Ibid., 4-5. Among the minor points of biographical problems include mis-identifying the year in which Dewitt Smith, Jr. departed the U.S. Army War College. He departed in 1980 not "this year" as noted on 4-5.

¹⁴⁷ U.S. Army War College, *Common Overview: Course 2*, 23; Maurice Matloff, "The Evolution of Strategic Thought," in *Military Strategy: Theory and Application*, ed.

argued that the combination of advanced technology, the presence of more civilians in the strategy-making process, and a significant change in “the environment of American strategic planning” meant “traditions are in conflict with realities and old bases of American foreign and military policy have been upset.”¹⁴⁸ Matloff argued that these factors meant it was no longer possible for military strategy to be separated from national strategy, directly contradicting Lykke’s understanding of the relationship between military strategy and national strategy presented in “Ends, Ways, Means.”¹⁴⁹

The second article Lykke included on the evolution of strategy was a speech by Edward Mead Earle to the U.S. Naval War College in 1949.¹⁵⁰ Earle warned that “strategy has of necessity required increasing consideration of nonmilitary factors, economic, psychological, moral, political, and technological” requiring senior military leaders and their staffs to be comfortable working with civilian leaders, to anticipate what these leaders require when making decisions, and to be prepared to make recommendations for recognizing non-military strategic interests, especially in peace negotiations.¹⁵¹ Earle argued that strategists need to be intellectually prepared to take advantage of opportunities when presented, not to limit themselves to clear goals ahead of time as Lykke’s “Ends, Ways, Means” model expected. With examples from

Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1982) 2-1 – 2-9. The syllabus required students to scan Matloff.

¹⁴⁸ Matloff, “The Evolution of Strategic Thought,” 2-1, 2-7-2-9.

¹⁴⁹ Ibid., 2-9.

¹⁵⁰ Edward Mead Earle, “Notes on the Term Strategy,” in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1982), 2-9 – 2-15.

¹⁵¹ Ibid., 2-14.

American, British, and German history, the inclusion of a speech in which speaker argued against Lykke's understanding of strategy showed that Lykke did not eliminate perspectives different than his own in *Military Strategy*, at least in 1982.

The third article that Lykke included on the evolution of strategy further showed Lykke's willingness to include alternative perspectives to his own. The paragraph-length introductions of ten theorists by military historian Trevor N. Dupuy argued that they turned Napoleonic practice into "the first conscious formulation of a theory of combat: the Principles of War."¹⁵² Dupuy also derided Basil Liddell Hart as only "able to sell himself as a military theorist . . . by picking [J.F.C.] Fuller's brains" and "a man of reasonable intelligence and brilliant writing skill who has no right on his own merits to be compared to any of these great military thinkers."¹⁵³ The inclusion of such a critique is remarkable because not only did Lykke quote Liddell Hart in "Defining Military Strategy" but he also included multiple writings from Liddell Hart in the 1982 and 1989 editions of *Military Strategy*.¹⁵⁴ By including Dupuy's criticism in 1982, Lykke showed readers that other thinkers viewed strategy differently than he did.

¹⁵² Trevor N. Dupuy, "Military History and Theory: The Laboratory of the Soldier," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1982), 2-16 – 2-18. The strategists in the article were Jomini, Clausewitz, Dennis Hart Mahan, Helmuth von Moltke, du Picq, Alfred Thayer Mahan, von der Goltz, Schlieffen, Foch, and Fuller.

¹⁵³ Ibid., 2-18.

¹⁵⁴ Lykke, "Defining Military Strategy," 5. In the 1982 edition of *Military Strategy*, Lykke included two articles by Liddell Hart making him the second-most prominent author, tying him with Lykke, John Collins, and Andre Beaufre, and just behind Rear Admiral Henry E. Eccles' three articles. Lykke included Liddell Hart's two articles in the 1989 edition, making him again the second-most prominent author (tying him with Eccles, Staudenmaier, and Wylie) and behind Lykke's three articles.

The final article Lykke included in the evolution of strategy chapter was Thomas H Etzold's primary lessons from Clausewitz.¹⁵⁵ Etzold augmented Army War College students limited reading of Clausewitz that year.¹⁵⁶ It also placed Clausewitz's understanding of strategy directly at odds with Lykke's "Ends, Ways, Means" model in two ways. First, Etzold claimed that Clausewitz equated "ends" with policy and "means" with strategy and that "the breakdown of the ends-means or policy-strategy relationship is a virtual certainty."¹⁵⁷ This directly refuted Lykke's belief in testimony and writings that military leaders should expect a clear end from the outset and that good strategy must find a balance among the components of strategy. Second, Etzold warned that "the task of today's planners, generals, and statemen, as of those in the past, is not to make war conform to plans but to make plans in conformance with war's uncertain nature and dynamics" which "they must learn in the study of history."¹⁵⁸ This directly undermined a theory of strategy like Lykke's, which assumed control of the elements of war ahead of time. The presence of these articles on the evolution of strategy and that even questioned the simplicity of Lykke's formula showed that Lykke did not use his position as editor of *Military Strategy* to exclude ideas that contradicted his own.

Apart from articles on the evolution of strategy, Lykke included a diverse group of writers to explain the fundamentals of strategy in more in the ninety-six page Chapter

¹⁵⁵ Thomas H. Etzold, "Clausewitzian Lessons for Modern Strategists," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1982), 2-18 – 2-21.

¹⁵⁶ U.S. Army War College, *Common Overview: Course 2*, 17-19. The students did not read Book 1, Chapter 1 of *On War* in 1982.

¹⁵⁷ Etzold, "Clausewitzian Lessons for Modern Strategists," 2-20.

¹⁵⁸ Ibid., 2-21.

3. Among the twelve authors of seventeen articles are five nationalities – seven Americans, two British, one French, one Swedish, and one Israeli.¹⁵⁹ Three of the authors – Michael Howard, Saul Cohen, and Julian Lider – never served in the military and two more – B.H. Liddell Hart and Yehoshafat Harkabi – served in the military, but gained their status as experts on military affairs as civilians.¹⁶⁰

Not only did Lykke choose a diverse group of authors for the seventeen articles in the fundamentals of strategy chapter, Lykke also selected them from a broader intellectual base. This is because all but Lykke's two articles appeared in print elsewhere before 1982 edition of *Military Strategy*. Seven of the articles were selections from books and two appeared in peer-reviewed academic journals.¹⁶¹ The articles by Eccles, Atkeson and Franz appeared in professional military journals.¹⁶² The remaining article by Harkabi

¹⁵⁹ Lykke, *Military Strategy*, (1982), vii.

¹⁶⁰ Harkabi was a founding member of the Israel military, fought in the 1947 war, and went on to serve as the director of Israeli military intelligence before becoming a professor at Hebrew University for more than 20 years. He wrote the book of which his article "Theory and Doctrine in Classical and Modern Strategy" is a part while a Fellow at the Woodrow Wilson International Institute for Scholars in Washington, D.C.

¹⁶¹ Andre Beaufre, "A Conception of Strategy" in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1982), 3-25 – 3-28; Michal Howard, "The Forgotten Dimensions of Strategy," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1982), 3-36 – 3-41. *Survival* first published Beaufre and *Foreign Affairs* published Howard.

¹⁶² Henry E. Eccles, "Strategy – The theory and application," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1982), 3-41 – 3-48; Edward B. Atkeson, "The Dimensions of Military Strategy," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1982), 3-17 – 3-25; Wallace P. Franz, "Grand Tactics," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1982), 3-68 – 3-73 *Naval War College Review* published Eccles, *Parameters* published Atkeson, and *Military Review* published Franz. *Military*

was at the time of publication a working paper written while Harkabi was a scholar at the Woodrow Wilson International Center for Scholars in Washington, D.C.¹⁶³ By including selections from a number of different publications, Lykke presented works already evaluated by the strategy-thinking community outside of the U.S. Army War College.

The second distinguishing characteristic of the 1982 of *Military Strategy* was how Lykke included his own writing in the text. First, Lykke did not begin the 1982 edition with his own writing but instead placed his articles immediately following those of Matloff, Earle, Dupuy, and Etzold.¹⁶⁴ This put Lykke's writing immediately following four authors whose main arguments questioned aspects of Lykke's own theory of strategy.¹⁶⁵

Review also published Lykke's article "Towards a Theory of Military Strategy" as "Defining Military Strategy" in 1989, as discussed in Chapter 2 of this thesis.

¹⁶³ Yeoshafat Harkabi, "Theory and Doctrine in Classical and Modern Strategy," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1982), 3-56 – 3-67. At the request of my thesis committee, I am limiting my discussion of Harkabi's remarkable work, which to my knowledge is not available outside of the 1982 edition of *Military Strategy*. Harkabi provided an overview of the arguments for the use of military theory and those who opposed it, including Tolstoy. He then compared and contrasted Jomini and Clausewitz based on their use of theory, argued that Clausewitz's approach eventually triumphed, and explained the implications of this for doctrine. Harkabi's is the most brilliant interpretation and justification of the role of theory in military operations I have read.

¹⁶⁴ Table of contents, *Military Strategy*, (1982), vii.

¹⁶⁵ U.S. Army War College, *Common Overview: Course 2*, (1982), 26 – 28. Lykke's articles were, however the first from *Military Strategy* that served as the sole basis for a two-hour seminar discussion. This means that even if Lykke's ideas about strategy did not have editorial pride-of-place in the text, Lykke made his ideas serve as the foundational understanding for students as they began to apply strategy in their two-day colloquium "American Ideals in Transition" along with lectures on "The Soviet Global Challenge," "East West Issues", and the "North/South Problem and Regional Conflicts" that made up the remainder of the first week of class.

Second, Lykke did use his editorial privilege to include two of his own articles.¹⁶⁶ Lykke's "Towards an Understanding of Military Strategy" was the first time Lykke's "Ends, Ways, Means" appeared in print. This article evolved into the May 1989 *Military Review* article with two minor differences. The first minor difference was a reference by Lykke to Secretary of Defense Harold Brown's 1980 "Posture Statement" which Lykke used as an example of "[focusing] all of our attention on military manpower and weapons systems and [ignoring] the determination of what these forces are supposed to accomplish" which to Lykke meant that "military strategy is not even mentioned."¹⁶⁷ Lykke removed this reference later because, as he explained in his Senate testimony, the 1986 Goldwater-Nichols Act requirement for a National Military Strategy was a "big help" to fix this.¹⁶⁸

The second minor difference between Lykke's 1982 and 1989 versions is a reference in the 1982 version to *Army Field Manual 100-1* that "national policy also concerns itself with all the basic elements of national power: political, economic, socio-psychological, technical and military."¹⁶⁹ By 1989, Lykke did not have a citation for this

¹⁶⁶ Arthur F. Lykke, Jr., "Towards an Understanding of Military Strategy," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1982), 3-1-3-5; Arthur F. Lykke, Jr., "A Methodology for Developing a Military Strategy," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1982), 3-5-3-8. Hereafter, Lykke, "Towards an Understanding of Military Strategy," in *Military Strategy*, 1982.

¹⁶⁷ Lykke, "Towards an Understanding of Military Strategy," in *Military Strategy*, (1982), 3-2.

¹⁶⁸ Lykke Testimony, 205.

¹⁶⁹ Lykke, "Towards an Understanding of Military Theory," in *Military Strategy*, (1982), 3-2.

even though the wording remained the same.¹⁷⁰ These minor differences aside, Lykke did not overemphasize his “Ends, Ways, Means” model with his articles in the 1982 edition of *Military Strategy*, but instead included them amidst other interpretations and articles that questioned Lykke’s ideas.

The third distinguishing characteristic of the 1982 edition of *Military Strategy* is the number of dimensions of strategy that Lykke decided to include in the 411 pages. First, Lykke included thirty-five pages of articles about land, sea and maritime, and air and space warfare.¹⁷¹ Second, Lykke included articles that examined strategy along the spectrum of conflict, with thirty-one pages for nuclear strategy, thirty-six for limited war, twenty-five for low-intensity conflict including guerrilla and revolutionary war, fourteen pages for proxy war, and twenty-three pages for arms control.¹⁷² Third, Lykke examined the relationship between strategy and doctrine (eight pages) and technology (twenty-three pages). Fourth, Lykke presented “Contemporary Strategic Thought” with Colonel William Staudenmaier’s *Military Review* article “Strategic Concepts for the 1980s: Parts I and II.”¹⁷³ The importance of this is that Lykke committed over half of the 1982 *Military Strategy* to articles explaining and developing the dimensions of strategy.

Lykke’s 1982 edition of *Military Strategy* is excellent because he provided an overview of strategy that includes a diversity of thinkers and perspectives, does not

¹⁷⁰ Lykke, “Defining Military Strategy,” 8.

¹⁷¹ Lykke, “Table of contents,” *Military Strategy*, (1982), vii.

¹⁷² *Ibid.*, vii – viii.

¹⁷³ William O. Staudenmaier, “Strategic Concepts for the 1980s: Parts I and II,” in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1982), 3-36 – 3-58.

overemphasize Lykke's "Ends, Ways, Means" model, and develops strategy across a broad range of domains and methods. Though Lykke's inclusion of a multitude of models, various taxonomies, and different historical interpretations makes the 1982 edition of *Military Strategy* more nuanced and less parsimonious, it provided for an understanding of the broader nonmilitary factors necessary for understanding and making strategy. This meant that the first edition of *Military Strategy* achieved Lykke's stated objective "to motivate military professionals to become actively involved in the study and discussion of strategy, and to contribute to its effective formulation and use in defending the national security interests of the United States."¹⁷⁴ By 1989, Lykke's eliminated these strengths.

The 1989 Edition of *Military Strategy*

Lykke's 1989 version of *Military Strategy* is a sharp contrast to the 1982 edition. Despite some improvements to the publication, Lykke removed the articles on the evolution of strategy and reduced the diversity of the writers, featured his own articles and ideas more prominently, and narrowed the discussion on the dimensions of strategy.¹⁷⁵ The 1989 edition of *Military Strategy* lacks most of the strengths of the 1982 version and is indicative of how Lykke's ideas emerged between 1982 and 1989.

The first major difference between the 1982 and 1989 editions of *Military Strategy* is Lykke's decision to narrow the breadth of articles, diversity of the writers and

¹⁷⁴ Lykke, "Introduction," in *Military Strategy*, (1982), 1-1.

¹⁷⁵ Lykke, *Military Strategy*, (1989) 1-438. Improvements to the publication include updated author biographies, complete bibliographical entries for each article, an expanded glossary, civilian-style sequential page numbers and a thicker cover than in 1982. Lykke also reorganized the book into five chapters rather than the sixteen from 1982.

the sources of the articles. Lykke purged all discussion on the evolution of military strategy including the articles by Matloff, Earle, Dupuy, and Etzold. He thereby removed any discussion on the importance of understanding political aspects of strategy, the historical context for the development of strategy, and the connection of strategy to the American historical experience, though he replaced Etzold's article warning against the misuse of Clausewitz with an article by Cronin that merely rephrased short sections of Clausewitz's *On War*.¹⁷⁶

Lykke also reduced the diversity of authors in the 1989 edition in terms of nationality and background. Where Lykke included writers from six nationalities to explain the fundamentals of strategy in 1982, the same chapter in 1989 contained articles exclusively by British and American writers.¹⁷⁷ For the rest of the work, Israeli Yehoshafat Harkabi and a German writing team led by Karl Kaiser were the only non-Anglo-American authors among the thirty-eight contributors to the 1989 edition.¹⁷⁸ Lykke also preferred military rather than civilian writers in the 1989 edition with only four of the thirty-one articles written by civilians.¹⁷⁹

¹⁷⁶ Patrick M. Cronin, "Clausewitz Condensed," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1989), 84-93.

¹⁷⁷ Lykke, "Table of contents," *Military Strategy*, (1989), xi.

¹⁷⁸ Ibid., xi—xv. The articles are Yehoshafat Harkabi, "Nuclear War and Nuclear Peace," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1989), 271-280; Karl Kaiser, et al, "Nuclear Weapons and the Preservation of Peace," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1989), 363-376. The thirty-eight articles does not include the three Soviet writers in the Chapter about Soviet Military Strategy.

¹⁷⁹ Ibid., xi—xv. The four articles by civilians were Michael Howard, "The Forgotten Dimension of Strategy," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1989), 46-51;

Where in 1982 Lykke selected articles from peer-reviewed journals, books and think tanks, in 1989 he replaced these with articles written by U.S. Army War College faculty and students. Some of the articles Lykke chose in 1989 came from military journals.¹⁸⁰ Others, were student papers. One of these appeared in both the 1973 and 1982 editions of *Military Strategy*, making Lykke's decision to include it in 1989 unremarkable.¹⁸¹ Lykke's decision to replace Cohen's article that went into more depth, connected geopolitics to World War II, and used German and English language sources with Ciccolo's article, however, is a notable exception.¹⁸² The significance of the

Patrick M. Cronin, "Clausewitz Condensed," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1989), 84-93; 63 Stephen P. Rosen "Vietnam and the American Theory of Limited War," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1989), 234-250; George P. Shultz, "Low-Intensity Warfare: The Challenge of Ambiguity," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1989), 256-262. The thirty-one articles exclude the six written by civilians on nuclear strategy and the article by Caspar Weinberger who as Secretary of Defense was a member of the military chain of command. See: Caspar Weinberger, "The Uses of Military Power," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1989), 263-268.

¹⁸⁰ David Jablonsky, "Strategy and the Operational Level of War: Part 1," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1989), 52-63; Keith A. Dunn and William O. Staudenmaier, "Strategy for Survival" in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1989), 170-177; Arthur E. Brown, Jr. "The Strategy of Limited War," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1989), 213-227; Harry G. Summers, "Vietnam: Lessons, Learned, Unlearned and Relearned," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1989), 251-255;

¹⁸¹ George R. Stotser, "Concepts of Guerilla Warfare and Insurgent War" in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1989), 181-198;

¹⁸² Saul Cohen, "Geopolitical Perspectives Ancient and Recent," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr., (Carlisle Barracks, PA: U.S. Army War College, 1982), 3-73-3-85; William N. Ciccolo, "Geography and Strategy," in

narrowing of the development of strategy thought, a less diverse group of authors, and the return to a reliance on military writers is that by 1989 Lykke presented authors whose writings supported his own understanding of strategy and in particular, his belief that military strategy was a component of national strategy.

The most clear example of the consequences for the change from the 1982 to the 1989 edition of *Military Strategy* was how Lykke used articles to interpret Clausewitz and Jomini. Lykke replaced Harkabi's comparison of the use of theory by Jomini and Clausewitz with short summaries of these two thinkers by Cronin and Hittle, both of which were more consistent with Lykke's view of military strategy as a separate and distinct component of national strategy.¹⁸³ Cronin, for instance, used quotations taken mostly from the unfinished portion of *On War* and made the questionable assertion that "military leaders should help shape policy" and that "while the statesman must retain authority over the general or admiral, the latter should, in Clausewitz's mind, be in a position to influence the former."¹⁸⁴ Clausewitz actually explicitly warned against this

Military Strategy: Theory and Application, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1989), 67-81. Ciccolo's appeared in the in the 1973 edition of *Military Strategy*. Though both addressed geopolitics, Ciccolo did so in much less detail than Cohen. For example, where Ciccolo explained the theories of Mahan, Mackinder, Spykman, and Seversky in short paragraphs, Cohen integrated the thinking of each and connected the thinkers to World War II.

¹⁸³ Yeoshafat Harkabi, "Theory and Doctrine in Clasical and Modern Strategy," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1982), 3-56-3-67; Cronin, "Clausewitz Condensed," 84-93; J.D. Hittle, "Jomini and his summary of the Art of War," in *Military Strategy: Theory and Application*, ed. Arthur F. Lykke, Jr. (Carlisle Barracks, PA: U.S. Army War College, 1989), 94-122.

¹⁸⁴ Cronin, "Clausewitz Condensed," in *Military Strategy*, (1989), 87. Clausewitz argued "the political aims are the business of government alone" which seems to contradict Cronin's interpretation of the Clausewitz quote. See: Clausewitz, *On War*, 89.

influence and even said “it is highly dangerous to let any soldier but the commander-in-chief exert an influence in cabinet.”¹⁸⁵ Hittle focused more on Jomini’s background and the operational level of war rather than strategy.¹⁸⁶ The choice by Lykke to include diluted interpretations of Clausewitz and Jomini in 1989 rather than works that supplemented a close reading of them as in 1982 showed the degree to which Lykke’s editorial choices narrowed the understanding of strategy in *Military Strategy*.

The second distinguishing characteristic of the 1989 edition of *Military Strategy* was the emphasis Lykke placed on his own writings and ideas. Whereas in 1982 Lykke placed his articles after those of Matloff, Earle, Dupuy, and Etzold, in 1989 Lykke placed his slightly refined articles first.¹⁸⁷ This meant that where Lykke’s “Ends, Ways, Means” model in the 1982 edition was a simplified model that followed a broad historical and conceptual overview, in 1989 Lykke’s was *the* model for the rest of *Military Strategy*.¹⁸⁸ Substantively, Lykke’s “Toward an Understanding of Military Strategy” in the 1989 edition was the same as the version published as “Defining Military Strategy” in *Military*

¹⁸⁵ Clausewitz, *On War*, 609.

¹⁸⁶ Hittle, “Jomini and his Summary of the Art of War,” 94 – 192.

¹⁸⁷ “Table of contents,” *Military Strategy*, 1989, xi. The only minor difference between the 1989 version of “Toward an Understanding of Military Strategy” and the 1982 version not discussed in the previous chapter was a minor difference in the title: the 1982 version was “Towards an Understanding of Military Strategy” while the 1989 edition was “Toward an Understanding of Military Strategy.” There were no differences between the 1982 and the 1989 versions of Lykke’s “A Methodology for Developing a Military Strategy.”

¹⁸⁸ Lykke, interview. Lykke said he decided to put his articles first at the suggestion of a U.S. Marine then serving as a faculty member. Indeed, Lykke’s article was the first article in the 2nd edition of *Military Strategy* in 1983. See: Arthur F. Lykke, Jr., ed. *Military Strategy: Theory and Application*, (Carlisle Barracks, PA: U.S. Army War College, 1983), vii.

Review discussed previously, though Lykke's three-legged strategy stools in *Military Strategy* included the eagle Lykke said he saw in his dream:

A MODEL FOR MILITARY STRATEGY



Figure 3. Lykke's Model for Military Strategy

Source: Arthur F. Lykke, Jr., "Towards a Theory of Military Strategy," in Arthur F. Lykke, Jr., ed. *Military Strategy: Theory and Application*, (Carlisle Barracks, PA: U.S. Army War College, 1989), 6.

TO ENSURE NATIONAL SECURITY, THE THREE "LEGS" OF MILITARY STRATEGY
MUST NOT ONLY EXIST, THEY MUST BE BALANCED.

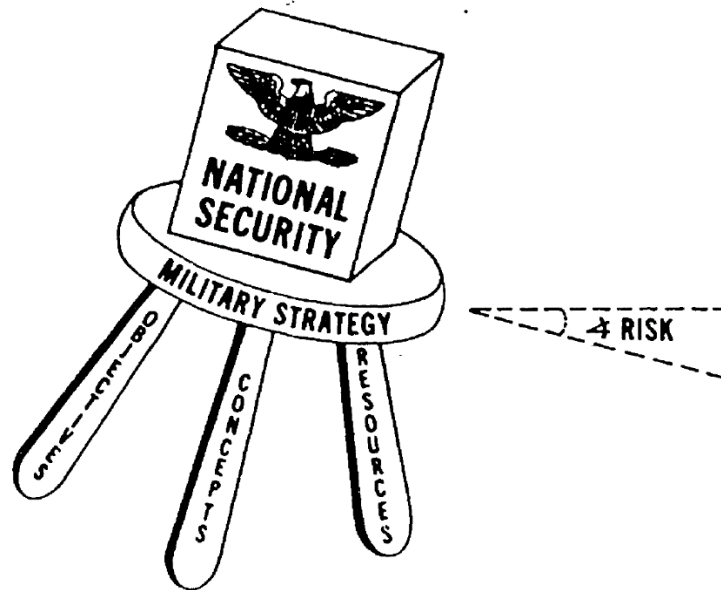


Figure 4. Lykke's Model for an Unbalanced Military Strategy

Source: Arthur F. Lykke, Jr., "Towards a Theory of Military Strategy," in Arthur F. Lykke, Jr., ed. *Military Strategy: Theory and Application*, (Carlisle Barracks, PA: U.S. Army War College, 1989), 7.

Even though Lykke did not significantly change his articles between the 1982 and 1989 editions of *Military Strategy*, he placed them first and foremost in the text to reflect his growing confidence in the models as a sound theory of strategy.

Lykke also used his editorial power to present select Chinese adages consolidated between the 5th and 3rd centuries B.C. and commonly attributed to a single Chinese philosopher, Sun Tzu.¹⁸⁹ Using a combination of the Samuel B. Griffith and T.R. Phillips

¹⁸⁹ Arthur F. Lykke, Jr., "The Wisdom of Sun Tzu," in Arthur F. Lykke, Jr., ed. *Military Strategy: Theory and Application*, (Carlisle Barracks, PA: U.S. Army War College, 1989), 82-83; Sun Tzu, *Sun-Tzu: The Art of Warfare*, trans. Roger Ames, (New York: Ballantine Books, 1993), 3.

translations and blending Liddell Hart's introduction from Griffith, Lykke included Sun Tzu's maxims on the study of war, readiness, the conduct of war, deception, methods of attack, maneuvering, long wars, and selflessness along with Sun Tzu's "Five Sins of the General" and "The Acme of Excellence for the Strategist."¹⁹⁰ Lykke did not provide analysis aside from an asserting that "since Sun Tzu was concerned with the fundamentals and principles of war, his thoughts are still relevant today."¹⁹¹ There is little substance in Lykke's Sun Tzu article, making it a missed opportunity to broaden the scope of the 1989 edition of *Military Strategy*.

The final distinguishing feature of Lykke's 1989 edition of *Military Strategy* was the reduction of dimensions of strategy both in number and development. Where Lykke used more than half of the 1982 edition of *Military Strategy* to expand the dimensions of strategy, he used a quarter of the total number of pages in the 1989 edition.¹⁹² Furthermore, the 1989 edition of *Military Strategy* reduced the development of these dimensions for all but nuclear war.¹⁹³ The 1989 edition of *Military Strategy* did retain all twenty-five pages of low intensity conflict but eliminated half of the readings on proxy war.¹⁹⁴ Though the total number of pages on limited war remains the same with thirty-six pages in 1982 and 1989, Lykke added emphasis on the U.S. Military's experience in

¹⁹⁰ Lykke, "The Wisdom of Sun Tzu," 82-83.

¹⁹¹ Ibid., 82.

¹⁹² Lykke, *Military Strategy*, (1989), xi-xii.

¹⁹³ Ibid., xiv.

¹⁹⁴ Ibid., xiii.

Vietnam with two articles in twenty-one pages.¹⁹⁵ The exception to this general decline in pages dedicated to developing the dimensions of nuclear war is Lykke's expansion of the section on nuclear war. In the 1982 edition, nuclear strategy took up thirty-one pages, but in 1989 Lykke used nearly one-hundred-thirty pages.¹⁹⁶ Lykke's quadrupling of pages dedicated to nuclear strategy from the 1982 to the 1989 edition parallels rising tensions between the United States and the Soviet Union over the same time period.¹⁹⁷ Despite the increase in nuclear strategy, Lykke eliminated sections that developed strategy with space, the arms trade, low-intensity conflict, doctrine, force development, and contemporary strategic thought.¹⁹⁸ The development of the dimensions of strategy tensions explain the general narrowing of strategic concepts with which the U.S. Army concerned itself in 1989, as explained in the next chapter of this thesis.

The 1989 edition of *Military Strategy* showed the extent to which Lykke used his position as the editor to make "Ends, Ways, Means" the primary strategy framework at the U.S. Army War College. Lykke eliminated authors whose articles contradicted his understanding of strategy and selected articles that separated military and national strategy. This was especially clear with the simplification of interpretations of Clausewitz and Jomini. Lykke also featured his own articles in the 1989 edition, which gave them the

¹⁹⁵ Lykke, *Military Strategy*, (1982), vii-viii; *Military Strategy*, 1989, xii; Rosen, "Vietnam and the American Theory of Vietnam, 234-250; Summers, "Vietnam: Lessons, Learned, Unlearned and Relearned," 251-255.

¹⁹⁶ *Military Strategy*, (1982), vii; *Military Strategy*, (1989), xii-xiii.

¹⁹⁷ Raymond L. Garthoff, *The Great Transition: American-Soviet Relations and the End of the Cold War*, (Washington, D.C.: The Brookings Institution, 1994), 8-14. I will discuss this more in Chapter 4.

¹⁹⁸ *Military Strategy*, (1989), pgs. xii-xv.

power of framing subsequent readings and reduced many of the dimensions of strategy that made up much of the 1982 edition of *Military Strategy*.

Conclusions from *Military Strategy: Theory and Practice*

When comparing the evolution of *Military Strategy: Theory and Practice* from 1982 to 1989, Lykke's contribution is readily apparent. Where Lykke showed in the 1982 edition a broad conceptual understanding of strategy that included political, technological, and social considerations, his selections for the 1989 edition focused almost exclusively on the military aspects of strategy. This change was consistent with Lykke's view that military strategy was a separate and distinct component of national strategy. Rather than developing the emerging senior leaders of the U.S. Army during their time at the U.S. Army War College to think in terms of national strategy as they did in 1982, by 1989 Lykke used his position as editor of *Military Strategy* to focus these students almost exclusively on developing military strategy in isolation from national strategy.

The evolution of the *Military Strategy* text from 1982 to 1989 showed that Lykke's editorial control, his reputation based on his Senate testimony and publication by *Military Review*, and his longevity at the U.S. Army War College gave him influence over how the U.S. Army thought about strategy, despite his model's obvious weaknesses. What also helped Lykke gain influence were changes in the global security environment, within the U.S. Army, and with policy guidance from American civilian leaders that for a brief period at the end of the Cold War appeared to allow the separation of military strategy from national strategy.

CHAPTER 4

DRIVING CHANGE: FROM A HOLLOW ARMY TO DESERT STORM

Lykke's "Ends, Ways, Means" model did not gain acceptance in the 1980s merely as a result of his Senate testimony, the publication of his article in *Military Review*, nor his control of the *Military Strategy* textbooks. Instead, Lykke's model became influential because of events that forced the U.S. Army to think of strategy in a specific way. The U.S. Army in the 1980s needed to be prepared to protect U.S. interests in the Middle East and fight a war against the Soviet Union, do so while moving on from memories of Vietnam and modernizing, and respond to civilian leader policy regarding the commitment of U.S. military forces. This meant that the U.S. Army could focus almost exclusively on the military aspects of strategy rather than national aspects over this time period. These unique circumstances in the 1980s meant that despite its weaknesses, Lykke's model seemed to address the strategy needs of the U.S. Army

The Global Security Environment

The global security environment allowed the U.S. Army in the 1980s to focus on being prepared to protect U.S. interests in the Middle East and to fight a war with the Soviet Union in Central Europe, if necessary. Each of these problems meant that the U.S. Army of the time could expect to fight a war with clearly defined military objectives, rely on a historic model of how to win, and understand a clear need for the development of military means. As a result, the three events that focused U.S. attention on the Middle East and the shift from détente to confrontation with the Soviet Union during the 1970s and 1980s meant that Lykke's model seemed to work for the 1980s.

Three events in the Middle East in the 1970s and 1980s focused the attention of U.S. policymakers on protecting U.S. interests in the region. The first event was the Yom Kippur war in 1973. Israel, surprised, outnumbered, and fighting against mostly Warsaw Pact weapon systems, recovered from initial setbacks and eventually defeated the Arab coalition.¹⁹⁹ By the end of the war, the Israelis even took the offensive and gained territory in Egypt, Jordan, and Syria before honoring a United Nations-brokered truce.²⁰⁰ For the United States, the Yom Kippur war was important for two reasons. First, in response to U.S. support for Israel and at the urging of Egyptian President Sadat, Saudi Arabia and other Arab oil producers cut oil exports.²⁰¹ The resulting oil shock harmed the U.S. economy and “stunned” members of President Nixon’s administration.²⁰² Second, the Israel-Arab conflict escalated tensions between the United States and the Soviet Union.²⁰³ When the Soviet Union threatened to send its military to Egypt members of the Nixon administration alerted the American military to prepare for war.²⁰⁴ These two

¹⁹⁹ Meir Finkel *On Flexibility: Recovery from Technological and Doctrinal Surprise on the Battlefield* (Stanford: Stanford Security Studies, 2011), 150-178.

²⁰⁰ Williamson Murray, “The 1973 Yom Kippur War,” from *Military Adaptation in War: With Fear of Change* (London: Cambridge University Press, 2011), 262-304.

²⁰¹ Andrew Scott Cooper, *The Oil Kings: How the U.S., Iran, and Saudi Arabia Changed the Balance of Power in the Middle East*, (New York: Simon & Schuster, 2011), 120-123.

²⁰² Ibid., 124, 134-136.

²⁰³ Michael B. Oren, *Power, Faith, and Fantasy: America in the Middle East 1776 to the Present*, (New York: W.W. Norton, 2011), 535.

²⁰⁴ Cooper, *The Oil Kings*, 125-127. Cooper claims that Nixon did not participate in the meetings and argued that Alexander Haig and Henry Kissinger alerted the military in response to Soviet actions.

lessons convinced U.S. policymakers to be more proactive in protecting U.S. interests in the Middle East.²⁰⁵

The second event that focused U.S. attention in the Middle East was the fall of the Shah of Iran. A staunch ally and one of the “twin pillars” of U.S. foreign policy in the region, the Shah of Iran enjoyed a strong relationship with the United States.²⁰⁶ When revolution swept the Shah from power and replaced his regime with a revolutionary Islamic government in 1979, U.S. interests in the Middle East were suddenly under threat.²⁰⁷ Decades of foreign and security assistance packages, sales of the most modern American weapons systems, and overt public support by President Carter failed to prevent the Shah’s overthrow.²⁰⁸ As a result, the United States faced the problem of a hostile government holding members of its embassy hostage, in a Middle East where the United States did not have a reliable ally aside from Israel. The failure of a U.S. military hostage rescue mission at Desert One showed the difficulty of protecting U.S. interests in the region and the need for the U.S. Army to adapt to do so.²⁰⁹

The third event that renewed the focus of the United States on its interests in the Middle East was the increased U.S. reliance on Middle Eastern oil. After the United States reached “peak oil” in 1970, the U.S. economy relied on imported oil and stable oil

²⁰⁵ Ibid., 44.

²⁰⁶ Ibid.

²⁰⁷ David C. Unger, *The Emergency State: America’s Pursuit of Absolute Security at All Costs*, (New York: The Penguin Press, 2012), 171, 173-175.

²⁰⁸ Cooper, *The Oil Kings*, 66-67, 115, 218-219.

²⁰⁹ Mark Bowden, *Guests of the Ayatollah*, (New York: Atlantic Monthly Press, 2006), 595-596.

prices made possible by access to Middle Eastern oil.²¹⁰ President Nixon's decision to resupply the Israelis during the Yom Kippur war resulted in the first "oil shock" and created a host of domestic political problems for Nixon amidst the Watergate investigation.²¹¹ Later, Carter interpreted the December 1979 Soviet invasion of Afghanistan as a Soviet move to threaten the Persian Gulf and global access to Middle Eastern oil.²¹² Coming just after the seizure of the U.S. embassy in Tehran, President Carter responded to the invasion of Afghanistan in his 1980 State of the Union address by warning that "an attempt by any outside force to gain control of the Persian Gulf region will be regarded as an assault on the vital interests of the United States of America, and such an assault will be repelled by any means necessary, including military force."²¹³ According to Jeffrey Record, the Carter Doctrine "emphatically and indiscriminately" committed the American military to protecting "a huge, distant, logistically remote region of the world" and "imposed new and exceedingly difficult obligations on U.S. conventional forces."²¹⁴ In the 1980s, President Ronald Reagan responded to Iranian

²¹⁰ Unger, *The Emergency State*, 167-170. Even though the United States did not receive much of its oil from the Middle East, a disruption on the supply from the region had a significant impact on global oil prices which did impact the U.S.

²¹¹ Cooper, *The Oil Kings*, 122-124.

²¹² Steve Coll, *Ghost Wars: The Secret History of the CIA, Afghanistan, and Bin Laden, From the Soviet Invasion to September 10, 2001*, (New York: The Penguin Press, 2004), 50. The Soviet invasion of Afghanistan is described below.

²¹³ James E. Carter, Jr., "The State of the Union Address Delivered Before a Joint Session of the Congress," (Speech, Washington, D.C., January 23, 1980), The American Presidency Project, <https://www.presidency.ucsb.edu/documents/the-state-the-union-address-delivered-before-joint-session-the-congress>, (accessed April 29, 2019).

²¹⁴ Jeffery Record, *Revising U.S. Military Strategy: Tailoring Ends to Means*, (Washington: Pergamon Brassey's International Defense Publishers, 1984), 37.

threats to cut off the supply of oil by reflagging Kuwaiti oil tankers as U.S. ships and then using the U.S. Navy to escort these ships through the Straits of Hormuz.²¹⁵

As a framework for responding to renewed U.S. policymaker interest in the Middle East, Lykke's "Ends, Ways, Means" model worked well for the U.S. Army. The Yom Kippur War influenced the development of U.S. Army doctrine specifically tailored as a "way" to fight on a similar battlefield and influenced the modernization of the U.S. Army's "means" of new equipment.²¹⁶ Likewise, the failure by the military to rescue the hostages in Iran forced the U.S. Army and the other services to make its materiel, logistical, tactical and operational "ways" and "means" more effective.²¹⁷ Lykke even used the Carter Doctrine in his 1982 and 1989 *Military Strategy* and *Military Review* articles as an example of a clear "end" for which the U.S. Army "must devise a military strategy."²¹⁸ Finally, Lykke used the deaths of 231 U.S. Marines killed in the barracks bombing in Lebanon in 1982 to emphasize the importance of separating military strategy from national strategy.²¹⁹ In his *Military Review* article Lykke included a photo of U.S.

²¹⁵ David Crist, *The Twilight War: The Secret History of America's Thirty Year War with Iran*, (New York: Penguin Group, 2012), 159-164.

²¹⁶ Donn Starry, "Reflections," in *Press On! Selected Works of General Donn A. Starry*, vol. 1, ed. Lewis Sorley, (Fort Leavenworth: Combat Studies Institute, 2009), 25-26.

²¹⁷ Bowden, *Guests of the Ayatollah*, 595-596.

²¹⁸ Lykke, "Towards an understanding of Military strategy," in *Military Strategy*, (1982), 3-3; Lykke, "Towards an understanding of Military strategy," in *Military Strategy*, (1989), 5; Lykke, "Defining Military Strategy," 6-7. Lykke did not actually create a strategy in these articles but instead used the "Ends, Ways, Means" model to show that such a strategy would be difficult.

²¹⁹ Dana Priest, *The Mission: Waging War and Keeping Peace with America's Military*, (New York: W.W. Norton & Company, Inc., 2003), 83.

Marines patrolling in Beirut, Lebanon months before the bombing with a caption that warned if U.S. policymakers decided “to use the military element of power in pursuit of national policy objectives that are primarily political or economic in nature . . . military commanders may then have difficulty deriving feasible military objectives from the objectives of national policy.”²²⁰ By connecting the deaths of the U.S. Marines to the decision by Reagan to commit military forces to non-military objectives as part of a national strategy, Lykke reinforced the argument that military and national strategies should be separated as “Ends, Ways, Means” argued.

Rising tensions with the Soviet Union during the 1970s and 1980s also convinced the United States to focus on a potential war with the USSR. Détente deteriorated and collapsed under Carter and escalated to outright confrontation in the early years of the Reagan administration.²²¹ Tension over arms control negotiations, the invasion of Afghanistan by the Soviet Union, and increased military spending by both countries contributed to the risk of war.

Tensions over arms control was the first issue that convinced the United States to prepare for with the Soviet Union by the 1980s. Shortly after taking office in 1977, President Carter set aside the framework for the second strategic arms limitations talks (SALT II) made by President Ford at Vladivostok in March 1976 and push for arms reductions, limits on multiple independently targetable, re-entry vehicles (MIRVs), and tie negotiations to human rights.²²² Carter’s decision made Brezhnev question the United

²²⁰ Lykke, “Defining Military Strategy,” *Military Review*, May 1989, 5.

²²¹ Unger, *The Emergency State*, 196.

²²² Raymond L. Garthoff, *Détente and Confrontation*, (Washington: Brookings Institute, 1985), 566, 802-806.

States' commitment to détente, extended the SALT II negotiations until 1979, and resulted in a treaty that neither side's legislature ever approved.²²³ Reagan later exacerbated these tensions over arms control when he appointed members of the Committee for the Present Danger to key positions within his administration, initially rejected any accommodation with the Soviet Union, and announced the Strategic Defense Initiative (SDI) in March 1983.²²⁴ Even though scientists denounced SDI as both "impossible and wicked," Reagan's announcement "infuriated and alarmed Soviet leaders" and NATO allies alike and destabilized deterrence by implying that the United States wanted a first-strike capability.²²⁵ Reagan's advisors also initially doubted Gorbachev's sincerity in ending the arms race, which contributed to Reagan walking away from a comprehensive deal to eliminate many weapons at Reykjavik.²²⁶ Even though the United States and the Soviet Union eventually negotiated the Strategic Arms Reduction Treaty (START) and the Intermediate-Range Nuclear Forces Treaty (INF),

²²³ Garthoff, *Détente and Confrontation*, 566.

²²⁴ Garthoff, *The Great Transition*, 8-14. Reagan, himself a member of the Committee on the Present Danger, appointed Nitze as chief arms negotiator, Kirkpatrick as U.S. Ambassador to the United Nations, and Casey as the Director of the Central Intelligence Agency.

²²⁵ Eliot Cohen, *The Big Stick: The Limits of Soft Power & the Necessity of Military Force*, (New York: Basic Books, 2016), 67; George C. Herring, *From Colony to Superpower: U.S. Foreign Relations Since 1776*, (New York: Oxford University Press, 2008), 870. The impact of SDI on Soviet-American relations and arms control talks remains in dispute. Hoffman assesses that the Soviets feared Reagan's announcement was part of a larger package to rescue the American arms manufacturers, *Dead Hand*, 222. Kissinger, meanwhile, claims that SDI "is widely credit with convincing the Soviet leadership of the futility of its arms race with the United States (Henry Kissinger, *World Order*, (New York: Penguin Press, 2014), 311.).

²²⁶ David E. Hoffman, *The Dead Hand: The Untold Story of the Cold War Arms Race and Its Dangerous Legacy*, (New York: Anchor Books, 2009), 259-274.

Robert Gates, believed the 1970s and 1980s were mostly characterized by the breakdown of attempts to halt the arms race.²²⁷

The second issue that refocused the United States on the threat of war with the Soviet Union was the invasion of Afghanistan in December 1979. Even though Carter and his National Security Adviser Zbigniew K. Brzezinski initially feared the invasion threatened Persian Gulf oil, they also saw an opportunity to exploit Soviet overreach.²²⁸ President Carter approved sending weapons and money to the mujahideen fighting the Soviets.²²⁹ Despite insisting earlier in his administration that the United States would not use its rapprochement with China against the Soviet Union, Carter did just that by sending Secretary of Defense Harold Brown to coordinate directly with the Chinese against the USSR.²³⁰ Reagan accelerated the support for the mujahideen, including providing them with Stinger and Blowpipe missiles against the initial advice of the Central Intelligence Agency.²³¹ Soviet frustration in Afghanistan along with increasing indications of U.S. support for the mujahideen heightened Cold War tensions and made the threat of war between the states in the 1980s a distinct possibility.

The third issue that showed an increased focus by the United States on the threat of war with the Soviet Union was the increase in military spending. While the active

²²⁷ Robert M. Gates, *Duty: Memoirs of a Secretary at War*, (New York: Alfred A. Knopf, 2014), 406.

²²⁸ Garthoff, *The Great Transition*, 82-84.

²²⁹ Herring, *From Colony to Superpower*, 853-855; Coll, *Ghost Wars*, 50-52.

²³⁰ Garthoff, *Détente and Confrontation*, 718, 932; Herring, *From Colony to Superpower*, 855.

²³¹ Coll, *Ghost Wars*, 150-152.

U.S. Army decreased by half after the Vietnam War, the Soviet Union increased spending on its conventional forces and expanded the number of Army divisions from 160 to 194 during détente.²³² The Carter administration expanded military spending in 1979 before the Soviet Union's invasion of Afghanistan, reflecting the growing tensions and suspicions in the waning years of détente.²³³ Despite campaign promises to cut spending, Reagan increased military spending by seven percent each year between 1981 and 1986, peaking at more than \$28 billion an hour.²³⁴ While much of this increased spending went to nuclear forces, the United States also spent \$109.2 billion dollars on its general purpose forces, more than the \$104.7 billion the U.S. spent at the peak of the Vietnam War in constant year dollars.²³⁵

That the United States spent more on conventional forces to confront the USSR than it did in its last war made clear to the U.S. Army that the Soviet Union was its most important enemy during the 1980s. Reagan's rejection of what he perceived as the failed policies of accommodation with the Soviet Union under Nixon, Ford, and Carter meant he instead pursued a national strategy that "prepared the way for a new kind of Soviet leader by pushing the old Soviet system to the breaking point."²³⁶ This broad statement of

²³² Edward N. Luttwak, *The Pentagon and the Art of War*, (New York: Simon and Schuster, 1984), 254-255.

²³³ Allan R. Millet and Peter Maslowski, *The Common Defense: A Military History of the United States of America*, (New York: The Free Press, 1994), 614.

²³⁴ Herring, *From Colony to Superpower*, 867.

²³⁵ Edward N. Luttwak, *The Pentagon and the Art of War*, (New York: Simon and Schuster, 1984), 254-255

²³⁶ John Lewis Gaddis, *Strategies of Containment: A Critical Appraisal of American National Security Policy During the Cold War*, rev. ed. (New York: Oxford University Press, 2005), 352-355.

national policy permitted the U.S. Army to identify “feasible, doable military objectives” as ends, rely on existing strategic concepts that Lykke used as examples of “ways,” and the commitment of the additional military funding to increase the U.S. Army’s “means.”²³⁷ As a result, the “Ends, Ways, Means” formula seemed to address the predominate security threat the U.S. Army faced at the time.

The U.S. Army of the Era

In order to address the threats to U.S. interests in the Middle East and the potential for war with the Soviet Union, the U.S. Army changed dramatically during the 1970s and 1980s. What drove these changes was a rigorous debates within the U.S. Army on the Vietnam War and how best to adapt the U.S. Army’s doctrine to be ready for the next war. These helped Lykke’s “Ends, Ways, Means” model gain support in the U.S. Army because Lykke’s separation of military strategy from national strategy aligned with the consensus view of Vietnam and U.S. Army doctrine appeared to create an operational “way” to fight and win.

The debate over the U.S. experience in Vietnam was an important aspect of the U.S. Army in the 1970s and 1980s. Two events facilitated this search for within the U.S. Army officer corps. Daniel Ellsberg’s release of the Pentagon Papers in 1971 was the first.²³⁸ Based on these documents, Army officers understood that U.S. civilian leadership did not blunder into Vietnam as early accounts of the war claimed.²³⁹ Instead, successive

²³⁷ Lykke Statement, 138; Lykke, “Defining Military Strategy,” 6. Despite failing to explain strategic concepts as discussed previously, Lykke mentions both of these as examples of ways during his testimony and his articles.

²³⁸ Herring, *From Colony to Superpower*, 770.

²³⁹ David Halberstam, *The Best and the Brightest*, (New York: Fawcett Crest, 1972). While Halberstam had access to the Pentagon Papers and relied on Daniel Ellsberg

U.S. Presidential administrations knew the risks and likely consequences of escalating the war, but committed U.S. servicemembers to the effort anyway and that “the U.S. political-bureaucratic system did not fail; it worked.”²⁴⁰

The importance of the Pentagon Papers on the U.S. Army in the 1970s and 1980s was that it convinced prominent officers to prevent another Vietnam. Army Chief of Staff Creighton Abrams “[integrated] the reserves so deeply into the active force structure that [he made] it very difficult, if not impossible, for the President to deploy any significant force without calling up the reserves.”²⁴¹ Colonel Harry G. Summers, Jr. argued that U.S. strategy failed in Vietnam because U.S. Army officers did not understand the nature of the war, did not consider American domestic political support and did not recognize the necessity of Congressional legitimization of the war.²⁴² As a solution, Summers argued

as a source, his book is nevertheless considered part of the “orthodox” school of Vietnam study. The title of his book indicates the irony that people such as McNamara and the “whiz kids” led the United States into the Vietnam War anyway in an arrogant, blundering way.

²⁴⁰ Gary R. Hess, “The Unending Debate: Historians and the Vietnam War,” *Diplomatic History*, vol. 18, no. 2, (Spring 1994), 240; Leslie H. Gelb and Richard K. Betts, *The Irony of Vietnam: The System Worked*, (Washington, D.C.: The Brookings Institute Press, 1979), 331.

²⁴¹ Lewis Sorley, *Thunderbolt: From the Battle of the Bulge to Vietnam and Beyond: General Creighton Abrams and the Army of His Times*, (Washington, D.C.: Brassey’s, 1998), 364. Though overtaken by more recent scholarship, the importance of *Thunderbolt* for the Abrams Doctrine is that Sorley, a retired Army officer, worked directly for Abrams at the time Abrams made the decision and Sorley emphasized his first-hand experience in making the claim. Conrad Crane and Gian Gentile are among those scholars who dispute the “Abrams Doctrine” calling attention to the lack of a primary source record (See: Conrad Crane and Gian Gentile, “Understanding the Abrams Doctrine,” *War on the Rocks*, (December 9, 2015), <https://warontherocks.com/2015/12/understanding-the-abrams-doctrine-myth-versus-reality/>).

²⁴² Harry G. Summer, Jr., *On Strategy: A Critical Analysis of the Vietnam War*, (Novato, CA: Presidio Press, 1982) 5-6.

that in future conflicts U.S. Army strategy “must begin with a mission analysis of the task assigned us by the American people by their elected representatives in Congress.”²⁴³ The reorganization of the U.S. Army undertaken by Abrams and the argument made by Summers aligned with Lykke’s “Ends, Ways, Means” model that separated military from national strategy.

The second event that influenced the debate within the U.S. Army on the meaning of Vietnam was the fall of Saigon to North Vietnamese forces in 1975. Maxwell Taylor immediately pointed to the fall of South Vietnam as a sign of an unequivocal U.S. defeat.²⁴⁴ While he attributed this mostly to South Vietnamese President Thieu, Taylor also pointed out “various actions taken by the President and Congress during and after the so-called cease fire of January, 1973.”²⁴⁵ Following Taylor’s lead, U.S Army officers writing about the war in books and professional military journals mainly acknowledged the defeat, but their explanation for why it occurred split them into various schools of thought.²⁴⁶ The simplicity of Lykke’s model meant that these differences in these schools of thought could be resolved as different “ways” of conducting the war.

²⁴³ Summers, *On Strategy*, 183-184.

²⁴⁴ Taylor, *Precarious Security*, 43.

²⁴⁵ Ibid.

²⁴⁶ Hess, “The Unending Debate: Historians and the Vietnam War,” pg. 240-241; David L. Anderson, “One Vietnam War Should Be Enough and Other Reflections on Diplomatic History and the Making of Foreign Policy,” *Diplomatic History*, vol. 30, no. 1, (January 2006), 2-5. Hess labeled these groups the Clausewitzians, the “hearts-and-minders,” and the “legitimacists” while Anderson divides the debate into the “analytical” school that examined the origins of the war and the “win” theorists who examined how the U.S. fought the war.

In addition to the debates within the U.S. Army about Vietnam, the U.S. Army changed as an institution in the 1970s and 1980s. While significant changes occurred in all of the Army's force development domains, doctrinal changes most influenced the emergence and acceptance of Lykke's model.²⁴⁷ The most important change was that U.S. Army Training and Doctrine (TRADOC) commanders Generals William E. DePuy, Donn A. Starry, and Carl E. Vuono made doctrine the foundation for U.S. Army thought.²⁴⁸ The prominence of the three versions of *FM 100-5, Operations* as U.S. Army capstone doctrine during this time marked the shift in the U.S. Army's thinking and shaped the way the U.S. Army prepared for war. These changes also reinforced the paradigm and assumptions behind Lykke's "Ends, Ways, Means" model of strategy.

²⁴⁷ Department of the United States Army Headquarters, *Army Doctrinal Reference Publication No. 1-02*, (Washington, D.C.: Department of the Army Headquarters, November 16, 2016). The army defines the force management functions as doctrine, organization, training, materiel, leadership and education, personnel, and facilities to explain the components of the Army as an institution. During the 1970s and 1980s each of the Army capabilities changed dramatically and there is extensive literature on each though this thesis focused on doctrine. For organization see: Jean L. Moenck, *Operation Steadfast Historical Summary: A History of the Reorganization of the Continental U.S. Army (1972-1973)*, (Fort Monroe, VA: Historical Office of the Chief of Staff, Training and Doctrine Command); John B. Wilson, *Maneuver and Firepower: The Evolution of Divisions and Separate Brigades*, (Washington, D.C.: U.S. Army Center for Military History, 1998). For training see: James F. Dunnigan and Raymond M. Macedonia, *Getting it Right: American Military Reforms after Vietnam to the Gulf War and Beyond*, New York: William Morrow and Company, 1993); John E Taylor, et al, *Establishing the Concepts and Techniques of Performance-Oriented Training in Army Training Centers: A Summary Report*, (Alexandria, VA: Human Resources Research Organization, 1975). For materiel see: James G. Burton, *The Pentagon Wars: Reformers Challenge the Old Guard*, (Annapolis, M.D.: Naval Institute Press, 1993); For personnel, leadership and education see: Bernard Rostker, *I Want You! The Evolution of the All-Volunteer Force*, (Arlington, V.A.: RAND Coporation, 2006); Arthur T. Coumbe, et al, *Still Soldiers and Scholars? An Analysis of Army Officer Testing*, vol. 10, (Carlisle Barracks, P.A.: U.S. Army War College, 2017).

²⁴⁸ Ingo Tauschweizer, *The Cold War U.S. Army: Building Deterrence for Limited War*, 214.

The first doctrine to change the U.S. Army's approach to war in the 1970s was *FM 100-5, Operations, 1 July 1976*, known as "Active Defense."²⁴⁹ Written under the direction of General William E. DePuy, a controversial officer with extensive service in Vietnam, as Assistant Vice Chief of Staff of the Army (AVICE), and as the first commander of the Training and Doctrine Command (TRADOC).²⁵⁰ DePuy used his position at TRADOC to implement the "Systems Approach to Training" (SAT) and shifted the focus of Army schools from education to training.²⁵¹ DePuy also eliminated considerations of national strategy from Army schools, informing retired U.S. Army General Bruce C. Clarke in 1976 that "the war colleges are still operating on the political

²⁴⁹ Headquarters, Department of The United States Army, *FM 100-5: Operations*, (Washington, D.C.: Department of the Army Headquarters, 1976), 1-200. Hereafter referred to as U.S. Army, *FM 100-5: Operations*, (1976) to distinguish it from subsequent editions.

²⁵⁰ Henry G. Gole, *General William E. DePuy: Preparing the Army for Modern War*, (Lexington, K.Y.: University Press of Kentucky, 2008), 214-230. I call DePuy controversial because the various accounts of him offer a polarized mix of high praise and harsh criticism, with little nuance in most accounts. Halberstam faulted DePuy for enabling Westmoreland's "Search and Destroy" tactics in Vietnam (Halberstam, *The Best and the Brightest*, 751). Krepinevich traced DePuy's various positions in Vietnam critically, especially DePuy's derision of the Marine CORDS program, DePuy's surprise at the difficulty of finding Viet Cong to destroy with massive firepower while a Division Commander, DePuy's insistence that firepower would defeat the insurgency, and, DePuy's selection after his service in Vietnam to be the Special Assistant to the Joint Chief of Staff for Counterinsurgency (Krepinevich, *The Army and Vietnam*, 175, 194, 197, and 247). Though generally sympathetic to DePuy, Gole's account of DePuy's time as AVICE presages some of the problems DePuy had as TRADOC commander including the close-knit group of junior officers who reported directly to him (Gole, *General William E. DePuy*, 214-230). Henderson criticized DePuy's time as TRADOC commander (William Darryl Henderson, *The Hollow Army: how the U.S. Army is oversold and undermanned*, (New York: Greenwood Press, 1990)).

²⁵¹ Henderson, *Hollow Army*, 147; Michael David Stewart, *Raising a pragmatic Army: Officer Education at the U.S. Army Command and General Staff College, 1946--1986*, (Ph.D., University of Kansas, 2010). Henderson faulted DePuy's SAT program as fundamentally changing the role of Army NCOs.

military level” while at Leavenworth “many of the political military aspects have been purged from the system.”²⁵² DePuy told Clarke that he would “make proposals to . . . orient the Army War College, at least, more toward operational problems.”²⁵³ The resulting “proposals” by DePuy likely resulted in Colonel Harry P. Ball, then-serving as the head of the Department of Military Strategy at the U.S. Army War College, to assign Lykke to rethink strategy.²⁵⁴ The result of this was Lykke’s “Ends, Ways, Means” model.

In writing the 1976 version of *FM 100-5: Operations*, DePuy gathered a close-knit group of loyal officers around him with whom he developed the doctrine without interference from the rest of the Army.²⁵⁵ Colloquially known as the “boathouse gang,” these officers along with then-Major General Donn Starry who was then the Commandant of the Armor School wanted the new doctrine to help the U.S. Army “above all else, *prepare to win the first battle of the next war* [emphasis in original].”²⁵⁶ To do so, DePuy used observations from the Yom Kippur war, which DePuy called “the most fortunate thing for us because it dramatized the difference between the wars we

²⁵² William E. DePuy, “Letter from William E. DePuy to General (retired) Bruce C. Clarke, 18 August 1976,” in *Selected Papers of General William E. DePuy*, compiled by Richard M. Swain, ed. Donald L. Gilmore and Carolyn D. Conway, (Fort Leavenworth: Combat Studies Institute, 1994), 197-198.

²⁵³ Ibid., 198.

²⁵⁴ Lykke, interview. Shortly after reporting to the War College Colonel Ball told Lykke that to start re-thinking the strategy curriculum. The timeline in DePuy’s letter to Clarke, the fact that Ball as the Head of the Department of Military Strategy would be the person to make strategy more operational as DePuy wanted, and Lykke’s arrival is consistent with Lykke’s account of the meeting with Ball. It is also likely that Ball wanted someone new to the faculty like Lykke to take up the project.

²⁵⁵ Gole, *General William E. DePuy*, 218-220.

²⁵⁶ U.S. Army, *FM 100-5: Operations*, (1976), 1-1.

might fight in the future and the war we had fought in the past.”²⁵⁷ Anticipating a war against the Soviet Union, the writers of the 1976 version of *FM 100-5* pointed out the increased lethality of the modern battlefield compared to World War II, asserted that the U.S. and its allies would fight outnumbered, argued for the use tactical nuclear weapons in conventional battle, and ceded tactical ground mobility to the Soviet Union.²⁵⁸ DePuy and the boathouse gang used “Active Defense” to call for new, high technology weapons systems, units trained in SAT methodologies, and a direct link between strategic and tactical commanders.²⁵⁹

Critics of Active Defense emerged almost immediately upon its publication. Within the U.S. Army, some who opposed DePuy’s other TRADOC reforms dismissed Active Defense as “the DePuy Doctrine.”²⁶⁰ Retired Air Force Colonel John Boyd ridiculed the doctrine, said that it erred by emphasizing firepower over maneuver, and argued that it would lead to wars of attrition.²⁶¹ William Lind, an associate of Boyd’s and a proponent of maneuver warfare, also attacked the doctrine as misguided.²⁶² Historian

²⁵⁷ John L. Romjue, et al., *Prepare the Army for war: a historical overview of the Army Training and Doctrine Command 1973-1993*, (Fort Monroe, Va.: Office of the Command Historian, U.S. Army Training and Doctrine Command, 1993), 66; Gole, *General William E. DePuy*, 240.

²⁵⁸ U.S. Army, *FM 100-5: Operations*, (1976), Chapter 2; Ingo Tauschweizer, *The Cold War U.S. Army: Building Deterrence for Limited War*, 205-207.

²⁵⁹ Gole, *General William E. DePuy*, 262.

²⁶⁰ Walter E. Kretchik, *U.S. Army Doctrine: From the American Revolution to the War on Terror*, (Lawrence, KS: University Press of Kansas, 2011), 200.

²⁶¹ Robert Coram, *Boyd: The Fighter Pilot Who Changed the Art of War*, (Boston: Little Brown and Company, 2002), 370.

²⁶² Tauschweizer, *The Cold War U.S. Army*, 212.

and U.S. Army officer Robert A. Doughty connected Active Defense to the French Army's pre-World War II doctrine that resulted in the 1940 Germany victory.²⁶³ Despite the criticisms, DePuy's used the 1976 version of *FM 100-5* to make doctrine the foundation for the U.S. Army's thinking about war and thereby established basis for further development.²⁶⁴

Addressing the shortcomings of Active Defense and developing a new doctrine became the responsibility of the next commander of TRADOC, General Donald Starry. One of the original writers of Active Defense, Starry initially defended DePuy's doctrine from its critics, but he also understood the limits of the doctrine based on his time as the V Corps commander in Germany.²⁶⁵ In particular, Starry's experience in Germany showed him that fighting the Soviet Union and Warsaw Pact forces and overcoming the limits imposed by U.S. allies in Europe required air power and extending the battlefield.²⁶⁶ Selecting the term AirLand Battle, Starry built the Army's new doctrine from a series of concepts that emerged initially from discussions with the Air Force.²⁶⁷

Starry also recognized that some of the critics of Active Defense, especially those in the U.S. Army, opposed the doctrine because of how DePuy took a personal interest in

²⁶³ Robert A. Doughty, *The Seeds of Disaster: The Development of French Army Doctrine, 1919-1939*, (Mechanicsburg, PA: Stackpole Books, 1985).

²⁶⁴ Tauschweizer, *The Cold War U.S. Army*, 214.

²⁶⁵ Robert A. Doughty, *The Evolution of US Army Tactical Doctrine, 1946-76*, (Fort Leavenworth, K.S.: Combat Studies Institute, 1979), 45; Tauschweizer, *The Cold War U.S. Army*, 214.

²⁶⁶ Tauschweizer, *The Cold War U.S. Army*, 216-218.

²⁶⁷ James F. Dunnigan and Raymond M. Macedonia, *Getting it Right: American Military Reforms After Vietnam to the Gulf War and Beyond*, (New York: William Morrow, 1993), 167-168.

writing the doctrine and centralized its development within a small group of officers in TRADOC.²⁶⁸ Starry decided to develop AirLand Battle with feedback from Army schools, including integrating concepts with which he personally disagreed and seeking feedback from critics of Active Defense such as retired Air Force officer John Boyd.²⁶⁹

The result was the 1982 version of *FM 100-5: Operations*, commonly known as AirLand Battle.²⁷⁰ In AirLand Battle, Starry insisted on the integration of air power and air mobility, envisioned deep ground penetrations with resulting long logistical lines, and showed concern with urban combat and desert warfare.²⁷¹ AirLand Battle also recognized the need for the operational level of war and coordination of combined arms.²⁷² Boyd strongly disagreed with the emphasis Starry and the AirLand Battle doctrine writers placed on synchronization in the new doctrine and even said the concept would “ruin the Army.”²⁷³ Nevertheless, the response to AirLand Battle by those who criticized Active Defense “was favorable on balance.”²⁷⁴

²⁶⁸ Doughty, *The Evolution of US Army Tactical Doctrine, 1946-76*, 43; Kretchik, *U.S. Army Doctrine*, 204.

²⁶⁹ Trauschweizer, *The Cold War U.S. Army*, 218-220. For example, Starry did not think the Field Artillery school’s concept for the integration of tactical nuclear weapons could work.

²⁷⁰ Headquarters, Department of The United States Army, *FM 100-5: Operations*, (Washington, D.C.: Department of the Army Headquarters, 1982), 1-200. Hereafter referred to as U.S. Army, *FM 100-5: Operations*, (1982).

²⁷¹ U.S. Army, *FM 100-5: Operations*, (1982), 1-1 – 1-5.

²⁷² Kretchik, *U.S. Army Doctrine*, 204.

²⁷³ Corum, *Boyd*, 371.

²⁷⁴ Trauschweizer, *The Cold War U.S. Army*, 222.

In a subsequent version of FM 100-5 in 1986, the doctrine writing team reaffirmed the changes made in 1982, re-emphasized the importance of “initiative, agility, depth, and synchronization.”²⁷⁵ The doctrine writing team that included then-Lieutenant Colonel Leonard D. Holder also integrated input from the German military into the new manual and expanded the operational level of war.²⁷⁶ As a consequence of making doctrine the basis for preparations for war and the fixation on combined arms combat in these manuals, U.S. Army leaders in the 1970s and 1980s deliberately ignored guerrilla warfare and counterinsurgency.²⁷⁷

Lykke’s “Ends, Ways, Means” model complemented these doctrinal changes in three ways. First, all three publications – Active Defense, AirLand Battle, and the 1986 version – envisioned a future war on battlefields where political-military considerations mattered less than military-operational ones.²⁷⁸ As a result, Lykke’s separation of military and national strategy matched the concepts in U.S. Army doctrine. Second, the changes Lykke made to *Military Strategy: Theory and Application* from 1982 to 1989 were consistent with DePuy’s instructions to re-orient the U.S. Army War College to focus on operational matters and a similar emphasis in doctrine.²⁷⁹ Third, the gradual emphasis in doctrine on the operational level of war also aligned with Lykke’s understanding of

²⁷⁵ Headquarters, Department of The United States Army, *FM 100-5: Operations*, (Washington, D.C.: Department of the Army Headquarters, 1986), 1-200. Hereafter referred to as U.S. Army, *FM 100-5: Operations*, (1982).

²⁷⁶ Kretchik, *U.S. Army Doctrine*, 211.

²⁷⁷ Trauschweizer, *The Cold War U.S. Army*, 218.

²⁷⁸ Trauschweizer, *The Cold War U.S. Army*, 214.

²⁷⁹ DePuy, “Letter from DePuy to Clarke, 18 August 1976,” 198.

strategy. As identified in Foster's Senate testimony, Lykke's model of strategy that focused exclusively on military ends, military ways, and military means worked in situations where other elements of national power were "adjuncts to military operations."²⁸⁰ According to U.S. Army doctrine in the 1980s, these situations were the operational level of war.²⁸¹ As a result, the acceptance of Lykke's "Ends, Ways, Means" model of strategy coincided with both the intellectual and doctrinal changes taking place in the U.S. Army in the 1980s.

The Weinberger Doctrine

The final influence on the U.S. Army during the 1980s was the Weinberger Doctrine. Given as a speech at the National Press Club on November 28, 1984, by Secretary of Defense Caspar Weinberger, he proposed six conditions for the use of military force:

1. First, the United States should not commit forces to combat overseas unless the particular engagement or occasion is deemed vital to our national interest or that of our allies. That emphatically does not mean that we should declare beforehand, as we did with Korea in 1950, that a particular area is outside our strategic perimeter.
2. Second, if we decide it is necessary to put combat troops into a given situation, we should do so wholeheartedly and with the clear intention of winning. If we are unwilling to commit the forces or resources necessary to achieve our objectives, we should not commit them at all. Of course, if the particular situation requires only limited force to win our objectives, then we should not hesitate to commit forces sized accordingly
3. Third, if we do decide to commit forces to combat overseas, we should have clearly defined political and military objectives. And we should know precisely how our forces can accomplish those clearly defined objectives. And we should have and send the forces to needed to do just that

²⁸⁰ Foster statement, 164.

²⁸¹ U.S. Army, *FM 100-5: Operations*, (1982), 2-3.

4. Fourth, the relationship between our objectives and the forces we have committed – their size, composition, and disposition – must be continually reassessed and adjusted if necessary

5. Fifth, before the United States commits combat forces abroad, there must be some reasonable assurance we will have the support of the American people and their elected representatives in Congress. This support cannot be achieved unless we are candid in making clear the threat we face; the support cannot be sustained without continuing and close consultation

6. Finally, the commitment of U.S. forces to combat should be a last resort.²⁸²

Even though he spoke at the end of Reagan's first term, Weinberger's speech was "the clearest enunciation of military policy since President Reagan was elected in 1980" and received official sanction by President Reagan and the National Security Council ahead of time.²⁸³

Lykke published the six conditions in the 1989 version of *Military Strategy*, but the debate over the Weinberger Doctrine within the U.S. Army began almost immediately after the speech.²⁸⁴ Future Chairman of the Joint Chiefs and U.S. Army General Colin L. Powell, then-serving as Weinberger's military assistant, worried that the conditions "publicly proclaimed, were too explicit and would lead enemies to look for loopholes," but that "Clausewitz would have applauded."²⁸⁵ Robert L. Sloane of The Strategic

²⁸² Caspar W. Weinberger, "The Uses of Military Power: Remarks Prepared for Delivery by the Honorable Caspar W. Weinberger, Secretary of Defense at the National Press Club," (Speech, Washington, D.C., 28 November 1984), *Inside the Cold War*, <https://www.pbs.org/wgbh/pages/frontline/shows/military/force/weinberger.html>, (accessed April 29, 2019), 5-6 . Hereafter referred to as Weinberger speech.

²⁸³ Richard Halloran, "'U.S. Will Not Drift Into a Latin War, Weinberger Says: In Policy Speech, He Rules Out Gradual 'Creep' of Forces Into Combat Anywhere," *New York Times*, November 29, 1984, 1, 4.

²⁸⁴ Weinberger, "The Uses of Military Power," 263-268.

²⁸⁵ Colin L. Powell, *My American Journey*, (New York: Random House, 1995), 303.

Studies Institute (SSI) at the U.S. Army War College argued that the tests revealed the struggle between Weinberger and Secretary of State George P. Schultz on the use of the military as a tool of diplomacy, concluding that the Secretary of Defense “in the aftermath of Vietnam, adhered to more limiting criteria for such a recourse.”²⁸⁶ Another contributor to the SSI volume claimed the Weinberger’s tests “represented the culmination of a long and painful odyssey which . . . preceded Vietnam and even Korea” because the tests “appeared to preclude limited war” even though Weinberger in a later speech “noted the requirement to meet threats at all levels of the conflict spectrum.”²⁸⁷ By contrast, future U.S. Army General David H. Petraeus disagreed with Weinberger’s conditions and criticized it as “unrealistic” in his 1987 Ph.D.²⁸⁸ Petraeus decided not to publish his Ph.D. dissertation in fear that his criticism would impact his career, showing that even relatively junior U.S. Army officers believed that the Weinberger doctrine enjoyed the support of high-level Army officers.²⁸⁹

²⁸⁶ Robert L. Sloane, “Introduction,” in *The Recourse to War: An Appraisal of the “Weinberger Doctrine,”* eds. Alan Ned Sabrosky and Robert L. Sloane, (Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, 1988), 1.

²⁸⁷ David T. Twining, “The Weinberger Doctrine and the Use of Force in the Contemporary Era, in *The Recourse to War: An Appraisal of the “Weinberger Doctrine,”* eds. Alan Ned Sabrosky and Robert L. Sloane, (Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, 1988), 13, 24.

²⁸⁸ David Cloud and Greg Jaffe, *The Fourth Star*, (New York: Random House, 2009), 66. The quotation is from the secondary source literature because Petraeus did not publish his Ph.D. dissertation.

²⁸⁹ Ibid., 65-66. Cloud and Jaffee attributed Petraeus’ decision to his concern over how senior Army leaders treated Andrew Krepinevich after he published his dissertation as *The Army in Vietnam* discussed earlier. Cloud and Jaffe also believed Petraeus “was more interested in rising through the Army than in provoking its top brass” (66)

Weinberger's articulation of the six conditions under which the U.S. government would commit military forces to combat provided support to Lykke's "Ends, Ways, Means" model of strategy for two reasons. First, Weinberger said that the United States should go to war only when it had clear objectives and overwhelming force. U.S. Army leaders could expect to have a clear military end and sufficient means before going to war. In terms of Lykke's strategy stool, this meant that if either the objective or the resources leg was unbalanced, U.S. policymakers would not commit the U.S. Army to combat. Second, Weinberger's speech indicated that he would not support the deployment of U.S. military forces for peacekeeping operations as in Lebanon.²⁹⁰ This matched Lykke's warning in his *Military Review* article.²⁹¹ Third, the context for Weinberger's speech in which he resisted Secretary Schultz's attempts to use the military as a tool for diplomacy aligned with Lykke's belief that military strategy should be separate from national strategy. As a result, Weinberger's speech set explicit policy guidelines that aligned with Lykke's model for strategy.

Lykke in Context: Conclusions

Despite the weaknesses identified and discussed in the preceding chapters, Lykke's understanding of strategy matched the needs of the U.S. Army in the 1980s. Clear policy pronouncements and actions by U.S. Presidents to maintain access to Middle Eastern oil and win a war against the Soviet Union in Central Europe permitted U.S. Army leaders to identify clear military "ends," establish "ways" through doctrine, and develop military "means" through increased military budgets. Unlike the U.S. military's

²⁹⁰ Weinberger speech, 5.

²⁹¹ Lykke, "Defining Military Strategy," 5.

experience in Vietnam, the policy objectives in the Middle East and the Soviet Union did not require the U.S. military to lead an effort to rebuild countries after a military confrontation. As a result, Lykke's belief in the separation of military strategy from national strategy was not a problem for the likely conflicts of the time.

Changes within the U.S. Army were also in line with Lykke's understanding of strategy. Debates in the 1970s and 1980s split the U.S. Army into groups on how to make sense of the military lessons of Vietnam. Lykke's understanding of strategy bridged many of the divisions of opinion. More importantly, TRADOC commanders used three versions of the capstone Army doctrine over the same time to focused the Army on military operations at the exclusion of matters of national strategy. These included DePuy's "purge" of national strategy teaching within Army schools and especially at the U.S. Army War College. As a result, Lykke's view that military strategy was a component of national strategy aligned with what senior Army leaders pushed the rest of the U.S. Army to believe.

Finally, U.S. Army leaders viewed the six conditions of the Weinberger Doctrine as official policy from the Reagan administration. As a result, Reagan's promise to make going to war a matter of last resort, with clear objectives, the promise of support from the American people and overwhelming force meant the U.S. Army could plan to have a clear military end, discretion in military ways, and the means necessary to win meant that Lykke's "Ends, Ways, Means" was a sufficient model for the 1980s.

CHAPTER 5: A USEFUL MODEL?

Conclusions

Lykke's "Ends, Ways, Means" model of strategy emerged as the dominate strategy model within the U.S. Army, not because it was a good model, but because of a combination of circumstances unique to the 1980s. In particular, Lykke wielded strong influence at the U.S. Army War College based on his longevity as a member of the faculty and his control as editor of the *Military Strategy* course reference text. In addition, the specific context of the 1980s global security environment, changes then taking place in the U.S. Army, and the influence of the Weinberger Doctrine also contributed to the acceptance of Lykke's model. These circumstances meant that the weaknesses in Lykke's "Ends, Ways, Means" model were easily identified by his fellow panelists at the Senate hearing and in Lykke's articles explaining the model, but the implications of these weaknesses did not seem as important in the 1980s as they are today. These weaknesses in Lykke's model are threefold.

First, Lykke made an assumption that military strategy is a separate and distinct component of national strategy. Based on Lykke's explanation of his theory, military strategy should be developed in isolation from the other components of national strategy, not synthesized or integrated with them from the beginning. Lykke's colleagues from the other War Colleges at the Senate Armed Services Committee testimony and several of the authors included in the 1982 edition of *Military Strategy: Theory and Application* directly refuted Lykke's assumption.²⁹² Nevertheless, Lykke and his model survived and

²⁹² Matloff, "The Evolution of Strategic Thought," 2-1 – 2-9; Earle, "Notes on the Term Strategy," 2-9 – 2-15; DuPuy, "Military History and Theory," 2-16 – 2-18; Etzold, "Clausewitzian Lessons for Modern Strategists," 2-18 – 2-21.

he used his position as the editor of *Military Strategy* to eliminate those authors who contradicted him and replaced them with others whose views aligned with his own.

The problem with Lykke's separation of military strategy from national strategy is that it creates strategies that are fundamentally flawed. Since the elements of national power are not synthesized and integrated at the beginning, "Ends, Ways, Means" by design leads to strategies which are military-focused, which fail to consider broader and longer-term considerations, all of which hinders the making of effective strategy. Critically, Lykke's assumption that military strategy is a separate component of national strategy is fundamental to his "Ends, Ways, Means" model, but it is no longer stated as an assumption in doctrine.²⁹³ What this means is that those using "Ends, Ways, Means" may be unwittingly using a flawed model.

Second, the model has at least two problems in formulation. The first problem of formulation is that Lykke expressed his model as two different mathematical formulas, neither of which logically connected the dependent variable of strategy to the independent variables of ends, ways, and means. In the first formula, strategy equaled the sum of the three components. The problem with this formula is that the absence of one of the components does not cause the strategy to fail. In reality, a strategy that lacked either an end, a way, or a mean could not work. Lykke did not identify this flaw. In the second formula, Lykke's strategy stool relied on a tripolar balance of the three elements ends, ways, and means. While this makes for a simple graphical depiction with the three-legged stool, Lykke never explained how an internal balance of three components

²⁹³ *FM 5-0: The Operations Process*, 18 March 2010; *JP 5-0: Joint Planning*, 16 June 2017; *Joint Doctrine Note 1-18: Strategy*, 25 April 2018.

secured the objective the strategy sets out to achieve. This formulation makes balancing the components more important than achieving the actual goal of the strategy. For someone using “Ends, Ways, Means” as the basis for making a real strategy, it is possible that they achieve the balance the stool implies but they nevertheless fail to achieve the larger objective the strategist intended to achieve.

The second problem of formulation is one of a circular definition caused by unclear terminology. Lykke asserted in both his testimony to the Senate Armed Services Committee and in his article that “ways,” “strategic concepts,” and “strategy” should not be confused for one another, but at no point did explain the difference between them. He also did not do so when questioned directly by Senator Nunn in his testimony. The problem is the inclusion of “ways” creates the possibility of a circular definition. For a strategist using “Ends, Ways, Means” to solve some problem, it is possible that the “way” they select from available strategic concepts is also the strategy, making it difficult if not impossible to identify the right ends or the appropriate means.

Aside from the logical problems, Lykke did not support his model with evidence. The quotations Lykke attributed to Maxwell Taylor, Herman Kahn, Henry Eccles, and Andrew Goodpaster did not clearly support Lykke’s “Ends, Ways, Means” model of strategy as Lykke claims. Instead, each of the strategists Lykke quoted used different terms for the components of strategy and viewed the interaction of the components differently than did Lykke. More problematic for Lykke is that a closer examination of each of these strategists showed that they all rejected Lykke’s belief that military strategy is a separate and distinct component of national strategy. Additionally, the quotation Lykke attributed to Maxwell Taylor as the basis for “Ends, Ways, Means” is from a trip for which there is no evidence, a speech for which there is no transcript, and an

assumption about the separation of military from national strategy that Taylor explicitly rejected in a previous trip.

Despite these problems, the circumstances 1980s helped Lykke's model overcome its weaknesses and gain acceptance within the U.S. Army. As the United States tried to move away the experiences in Vietnam, U.S. policymakers explicitly focused the U.S. military on maintaining access to Middle Eastern oil and deterring a potential war with the Soviet Union in Central Europe. The policy guidance explaining each of these aligned with Lykke's "Ends, Ways, Means" theory. Subsequent reforms by senior U.S. Army leaders, especially in doctrine, also focused the Army on operational matters. This emphasis by senior Army leaders matched Lykke's understanding of strategy. Finally, Secretary of Defense Weinberger's declaration of conditions under which U.S. policymakers would commit U.S. military forces explicitly promised that the U.S. military could count on a clear objective and overwhelming resources ahead of time. Weinberger's promise of clear ends and sufficient means along with his skepticism for committing military forces to achieve non-military objectives seemed to imply the Secretary of Defense's support for Lykke's "Ends, Ways, Means" model.

The problem with Lykke's understanding is not just in the application of his model, but with the model itself. Based on my analysis, Lykke's "Ends, Ways, Means" model is based on a flawed assumption, problematic logic, and questionable evidence. Lykke's model gained acceptance in the U.S. Army because Lykke's promotion of the model coincided with a period in U.S. history when leaders in the U.S. Army understood that they needed to maintain access to a single natural resource and deter war against a known enemy. More importantly, through the Weinberger Doctrine, the Reagan administration seemed to limit the chances the U.S. Army would be committed

elsewhere. These circumstances and policy guidelines just happened to align with what many senior Army leaders wanted the Army to believe during the same time period.

So what?

In his classic book *The Seeds of Disaster*, Robert Doughty vividly recounts how after its humiliating defeat to the Germans in 1940, the French sought answers.²⁹⁴ At the Riom trial, French officers testified one after another that the problems that led to their defeat had nothing to do with decisions made by senior French Army leadership in the time leading up to the German assault.²⁹⁵ Instead, the French turned to any other excuse they could find, from the poor quality of recruits, to inadequate equipment, and to the “supposed ‘genius’ of the German officer corps.”²⁹⁶ As the trial proceeded, the testimony increasingly turned to the role of doctrine. Writing about the French military’s defeat in 1940, Doughty points out:

The creation of an effective military force depends upon more than the provision of adequate resources, the building of advanced weapons, or the availability of manpower. Military forces must be organized, equipped, and trained properly. Doctrine is the substance that binds them together and makes them effective. Although a false doctrine can be dangerously suffocating to all innovation, an adequate doctrine can be conducive to creative solutions and is a vital ingredient in any recipe for success. With an adequate doctrine, effective forces can be deployed. With an inadequate doctrine, a military force and a nation are courting disaster. The experience of France testifies to this clearly.²⁹⁷

Just as flawed doctrine led to the humiliating defeat of the French in 1940, flawed doctrine within the U.S. military could be equally disastrous for the United States.

²⁹⁴ Doughty, *The Seeds of Disaster*, 185.

²⁹⁵ Ibid.

²⁹⁶ Ibid., x.

²⁹⁷ Ibid., x-xi.

Between the time the Soviet Union withdrew its military from Central Europe in 1989 and the time collapsed under its own economic contradictions in 1991, the U.S. Army crushed the Iraqi army in Desert Storm. The coincidence of these events made it appear that United States “won” the Cold War and that U.S. military doctrine triumphed when called upon. Based on the burning wreckage of the Iraqi army in the deserts of Kuwait in 1991, it certainly seemed that U.S. tactical and operational doctrine got it right.

The test for Lykke’s “Ends, Ways, Means” model that became the U.S. military’s strategy doctrine came later. From Somalia and the former Yugoslavia to Afghanistan and Iraq, the U.S. military struggled to connect the tactical and operational successes of U.S. servicemembers to lasting strategic success. The consistency of these experiences indicate that something is clearly wrong with how the U.S. military connects military operations to political objectives. While Lykke does not bear sole responsibility, his “Ends, Ways Means” model contributed significantly to the inability of the U.S. military to form effective strategies over the past thirty years. The problems with “Ends, Ways, Means” were clear at least as soon as Lykke finished his Congressional testimony more than thirty years ago. And yet, “Ends, Ways, Means” remains the foundation for strategy in the United States military. Perhaps it is finally time for something better.

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