

A Path to Operational Art for the Republic of Korean Army: Necessity and Developments of Operational Art

A Monograph

by

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Abstract

A Path to Operational Art for the Republic of Korea Army, by MAJ Sanghyup Lee, 42 pages.

This military adopted the doctrinal concept of operational art solely by way a literal translation of US doctrine. This translation made it difficult for ROK soldiers to internalize translated US Army doctrinal concepts, such as operational art, mainly because of a lack of discourse and differences in the social construction of reality between the two military cultures. The Operational art as understood in the US military, can be defined as the cognitive approach of commanders and staffs to use their military capacity to integrate ends, ways, and means. In Korean, it is “*Jakjoensul-eun jihuikwan mit chammo-eui kunsajuk neungryoek-eul hwalyonghan injijeok sagoryoek-ida. Geu mokjoek-eun mokpyo, bangbeob, sudan-eul tonghaphan-eun gut-ida,*” “작전술은 지휘관 및 참모의 군사적 능력을 활용한 인지적 사고력이다. 그 목적은 목표, 방법, 수단을 통합하는 것이다.” The characteristics associated with US operational art are creativity, anticipation, cooperativity, and complementarity with the science of operations. The Operational art can be improved by the synthesis of theory, history, doctrine, and the practice of operational art. Given the characteristics of operational art, the Wartime Operational Control Transition and Defense Reforms 2.0 in the ROK necessitate the development of an indigenous concept of operational art for the ROK. The conclusion demonstrates practical recommendations for the ROK about how to adapt and improve the operational art, explicitly focusing on doctrine and leadership and education domains out of US Army's capabilities development frameworks, doctrine, organization, training, material, leadership and education, personnel and facilities, routinely abbreviated as DOTMLPF.

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Abbreviations

ADP	Army Doctrine Publication
ADM	Army Design Methodology
AMSP	Advanced Military Studies Program
CFC	Combined Forces Command
CGSC	Command and General Staff College
CGSOC	Command and General Staff Officer Course
CJCS	Chairman of the Joint Chiefs of Staff
COTP	Conditions-based Operational Control Transition Plan
COVID-19	Corona Virus Disease 2019
C2	Command and Control
CTF	Combined Task Force
DDC	Doctrine Development Center
FM	Field Manual
GOC	Ground Operations Command
JCS	Joint Chiefs of Staff
JP	Joint Publication
MDO	Multi-Domain Operations
MND	Ministry of National Defense
PME	Professional Military Education
ROK	Republic of Korea
ROKA	Republic of Korea Army
SAMS	School of Advanced Military Studies
SCM	Security Consultative Meeting
SPMC	Special Permanent Military Committee
TRADOC	Training and Doctrine Command

USG	United States Government
WMD	Weapons of Mass Destruction
WOCT	Wartime Operational Authority Transition
WOPE	Wartime Operational Planning and Execution

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Introduction

In January 2020, the Ministry of National Defense (MND) in the Republic of Korea (ROK) declared that the ROK military has to possess capabilities to *lead* the combined defense on the Korean peninsula with the United States (US) military. The declaration aims for implantation of the Wartime Operational Control Transition (WOCT).¹ From a Korean perspective, the WOCT appears as a historical event designed to regain one of the ROK's national sovereignties. However, it also reminds Koreans that since the Korean War ended seven decades ago, the ROK's national defense, especially for wartime, has heavily relied on the ROK-US alliance.² In this sense, implementing the WOCT will require the ROK military to have the full range of military capabilities needed to assume the roles currently held by US forces. These capabilities range across all warfighting functions and services. The MND has designated Command and Control (C2), Wartime Operational Planning and Execution (WOPE), personnel, equipment, and materials as the key capabilities needed. The defense ministry periodically holds the Special Permanent Military Committee (SPMC) to assess progress in these areas.³ In terms of the capabilities associated with the WOPE, one can argue that operational art is a centerpiece for both planning and execution, and the improvement by the ROK military in this area is essential to the goals to assume Wartime Operational Control.

¹ The WOCT is a condition-based plan to establish the future command structure of the Combined Forces Command (CFC) in Korea, led by a ROK four-star general. Currently, a US general commands the CFC, and the ROK general is in charge of his deputy. ROK Ministry of National Defense, *Ministry of National Defense Report 2020*, January 21, 2020, accessed September 14, 2020, <https://www.mnd.go.kr/mbshome/mbs/plan/>, 17-18; The CFC transitioned Peacetime Operational Control to ROK Joint Chiefs of Staff (ROK JCS) on December 1, 1994, ROK Joint Chiefs of Staff, *The History of Operational Control Transition*, accessed September 15, 2020, https://www.jcs.mil.kr/mbshome/mbs/jcs2/subview.jsp?id=jcs2_020401030000.

² Mutual Defense Treaty between the ROK and the US has supported the ROK-US alliance ever since it came into force in 1953, US Government Printing Office, *Mutual Defense Treaty Between the United States and the Republic of Korea; October 1, 1953*, accessed September 14, 2020, https://www.usfk.mil/Portals/105/Documents/SOFA/H_Mutual%20Defense%20Treaty_1953.pdf.

³ ROK Ministry of National Defense, *Military Reforms 2.0* (Seoul, Republic of Korea: National Defense Printing Office, February 2019), 26; ROK Ministry of National Defense, *Ministry of National Defense Report 2020*, 17-18.

In 1989, the ROK Army (ROKA) adopted the US Army doctrinal concept of “Structure of Modern Warfare,” as published in 1986.⁴ As a part of “Fundamentals of AirLand Battle Doctrine,” the doctrine describes three broad activities for the conduct of modern war: strategy, operational art, and tactics. The levels of war, such as theaters of war, campaigns and major operations, and battles and engagements, categorize the activities.⁵ Their doctrine implies that the range of the operational art is within the campaigns and major operations, which is different from the current context of operational art. Thus, since its adoption in 1989, the ROKA has recognized the importance of operational art because of the WOCT and Military Reforms and has endeavored to develop operational art.⁶ Despite this emphasis, outcomes have been more or less questionable.

There have only been two Korean publications directly related to operational art as a reference level. Although newly published doctrines contain the concept of operational art within the structure of modern warfare, there appear to be no significant adjustments in these publications that reflect situational changes in the ROKA, but instead, simply represent the translations of the US Army doctrine. For example, a foundational doctrine named “Ground Operations,” published by the ROKA in 2018, articulates operational art as the art and science for employing military forces through the design of campaigns and major operations to achieve strategic objectives. It also emphasizes the concept’s bridging role at the operational level to link military strategy and tactics within the structure of modern warfare and the levels of war.⁷ This conceptualization turns out to be similar to US Army doctrine in 2008 and still includes the

⁴ ROK Army, Field Manual Interim 13-3-2, *Operational Art: Execution of Ground Operations at Operational Level* (Seoul, Republic of Korea: National Defense Printing Office, April 2013), 1-2.

⁵ US Department of the Army, Field Manual 100-5, *Operations* (Washington DC: Government Printing Office, May 1986), 9-11.

⁶ ROK Army, Field Manual Interim 13-3-2, *Operational Art: Execution of Ground Operations at Operational Level*, 1.

⁷ ROK Army, Field Manual 1, *Ground Operations* (Seoul, Republic of Korea: National Defense Printing Office, December 2018), 13.

modern warfare structure of the now outdated 1986 US Army doctrine.⁸ Therefore, one can argue there is still room to improve the understanding of operational art within the ROKA and develop it further based on recent doctrine changes and debates surrounding operational art within the US Army. In this regard, this research argues that the ROKA should improve its own understanding of operational art as one of the capabilities needed for the WOCT or, ultimately, for its own future as an operating force.

Literature Review

Even if operational art is a well-known military concept, its origin, definition, and characteristics are controversial within both the academic community and the US military. The concept has undergone several changes since the US Army first began using the term. Regarding the origins of operational art, Robert M. Epstein, a historian at the School of Advanced Military Studies (SAMS), US Army Command and General Staff College (CGSC), contends that operational art emerged during the Napoleonic war in 1809, along with the advent of modern warfare.⁹ On the other hand, James Schneider, another historian in the SAMS, argues that operational art started during the American Civil War, tying its beginnings to seven conditions required for it to exist, such as weapon lethality, logistics, signal technology, military formation, command structure, operationally minded enemy, and the capacity of nations to conduct war.¹⁰ Dennis E. Showalter, a history professor at Colorado College, believes that Helmuth von Moltke, as the chief of staff in the Prussian Army, initiated operational art in the Austrian-Prussian War

⁸ US Department of the Army, Field Manual 3-0, *Operations* (Washington DC: Government Printing Office, February 2008), 6-1.

⁹ Robert Epstein, *Napoleon's Last Victory and the Emergence of Modern Warfare* (Lawrence, KS: University Press of Kansas, 1994), 5-8.

¹⁰ James M. Schneider, *Vulcan's Anvil: The American Civil War and the Foundations of Operational Art*, SAMS Theoretical Paper N. 4, June 16, 1991, accessed September 23 2020, <https://cgsc.contentdm.oclc.org/digital/collection/p4013coll11/id/9>, 1, 58-61.

and Franco-Prussian War.¹¹ US Army Lieutenant Colonel Wilson Blythe Jr. argues that the Soviet Union first developed the concept of operational art during the interwar period of World War I and World War II.¹² As such, arguments concerning the beginnings of operational art have been based on how these writers defined the concept, and their definitions vary just as widely.

When it comes to the definition, Schneider states that it is “the creative use of distributed operations for the purpose of strategy.”¹³ Showalter suggests that “Operational art is...the intermediate area between tactics and strategy, involving the use of large military forces to decide campaigns in the context of a theatre of war.”¹⁴ More generally, John T. Kuehn, a former navy officer and a military historian in the CGSC, defines it as “the design and conduct of campaigns.” He articulates that operational art is to use operational-level units during “a sustained period.”¹⁵ Given the aforementioned literature, one should consider that the definition of operational art includes ways of military means for strategic ends.

Research Questions

This paper seeks primarily to understand how the ROKA can improve its understanding of operational art to reflect its own current institutional environment more accurately. To gain this understanding, several secondary questions must be answered. Why does the ROKA lack sufficient understanding of operational art given the time that has passed since its adoption? What is the descriptive definition of operational art for the ROKA? Why is operational art even necessary for the ROKA? What should the ROKA do to improve its understanding of operational

¹¹ John Andreas Olsen and Martin van Creveld, *The Evolution of Operational Art: From Napoleon to the Present* (New York: Oxford University Press, 2011), 3-4.

¹² Wilson C. Blythe Jr, “A History of Operational Art,” *Military Review* (November and December 2018), 37-39.

¹³ Schneider, *Vulcan’s Anvil*, 1, 58.

¹⁴ Martin Van Creveld and John Andreas Olsen, *The Evolution of Operational Art: From Napoleon to the Present* (New York: Oxford University Press, 2011), 35.

¹⁵ John T. Kuehn, *Napoleonic Warfare: The Operational Art of the Great Campaigns* (Santa Barbara, California: ABC-CLIO, LLC, 2015), 15.

art? After answering these questions, in the conclusion chapter, this research suggests that the ROKA should improve its understanding of operational art by developing its doctrine and military culture beyond simple translation of US doctrine and modifying its Professional Military Education (PME) system.

Methodology

To answer the research questions above, this research will examine primary and secondary resources associated with ROKA doctrine development qualitatively. The monograph begins by identifying shortcomings in ROKA's doctrine adoption system, which has created a lack of understanding of operational art. Theoretical frameworks to prove the pitfalls are the Stephen Lauer's Adaptive System Model and Peter L. Berger and Thomas Luckmann's the Social Construction of Reality provide theoretical frameworks that expose the pitfalls associated with ROKA's system for adopting US doctrine. Berger and Luckmann's theory is expected to prove that the different social constructions of reality for the ROKA and the US Army should result in difficulty to internalize the ROKA doctrine when adopting doctrinal concepts from the US Army. This exploration includes several recommendations to minimize these hazards.

The monograph also examines the concept of operational art as promulgated in US military doctrine. This section explores operational art as a doctrinal concept, as well as its functions, contexts, and considerations so that a reader can understand what a suitable concept of operational art might be. It is based on the current doctrine and recent discussion concerning operational art in the US Army and US Joint Chief of Staff (JCS).

Third, to establish a shared understanding of why operational art is necessary for the ROKA, the monograph analyzes the structure of the ROKA based on the WOCT and Defense Reforms 2.0 and identifies the importance of operational art's role and function to the WOCT. Lastly, this monograph makes recommendations for the future development of the ROKA's operational art concept. In this last chapter, the monograph uses the US Army's capabilities

development framework, doctrine, organization, training, material, leadership and education, personnel, and facilities – routinely abbreviated as DOTMLPF to suggest ways in which the ROKA can improve the understanding and implementation of the operational art concept. More specifically, the doctrine and the leadership, and education domains with particular emphasis on professional military education come up as practical recommendations applicable to the current ROKA officer educational system.

The scope of this monograph is limited to the ROKA, the US Army, and the JCS. Sister services in the ROK and US Armed Forces are excluded. Due to inaccessibility to internal official sources concerning the current discussion of operational art within the ROKA, which are not publicly available, this monograph does not include them as the objects of analyses. In light of identifying how the ROKA defines operational art, it only covers the doctrinal context since 2000, assuming that the changes in the 80s and 90s are mostly irrelevant. Other important limitations are the specific capabilities needed for the WOCT, which are classified. Thus, when examining the necessity and importance of operational art within the context of the WOCT, this paper relies on general conceptualizations from open-source materials rather than detailed descriptions regarding specific capabilities articulated in official documents. The last chapter's recommendations focus on a short-term plan for the next three to five years that might be applied to the current system. Longer-term recommendations, such as creating operational art based on Korean military theorists, forces development, and organizational changes, are limited because of the assigned number of pages in this monograph.

Pitfalls in ROK Doctrine and Operational Art

As previously mentioned, current ROKA doctrine with regard to operational art seems to blend the 2008 US Army doctrine with that of 1986. Given that these two versions of US Army doctrines were developed with different logics, the merging of the two within ROKA may reflect a flawed logic. Historically speaking, because the ROKA has adopted US Army doctrine since the Mutual Defense Treaty of 1953, direct translations of US Army doctrine are more likely to be prevalent throughout ROKA doctrine. Furthermore, when the US Army changes its doctrine, the ROKA tends to adopt these changes without adequate research or modification. This might lead to confusion or misunderstanding. For example, in July 2019, the US Army published its new Army Doctrine Publications (ADPs) from ADP 1 to ADP 7-0 across all warfighting functions.¹⁶ On the basis of these new ADPs, the ROKA proceeded with its own doctrinal update, the so-called "Doctrine Revolutions 2020." These updates reflect comprehensive revisions, including terminologies, definitions, procedures, and the composition of chapters solely based on the new US ADPs.¹⁷ Based on this latest update, one could argue that the adoption by translation is the tendency of the ROKA within the doctrinal domain. This doctrinal dependency and the combined defense system with the US are likely to reinforce the vicious habit of blanket adoption of US doctrine.

Importantly, this practice can hinder the critical and creative thinking needed to build up the ROKA's own doctrine. In other words, the integrated nature of the defense system can be an excuse to blindly adopt US Army doctrine in whole, without detailed consideration on the needs of the ROK Army. However, there is no doubt that a sovereign nation's military must have its own unique doctrine, one that comports with its own culture, history, theory, and so on. In this

¹⁶ US Department of the Army, Army Doctrine Publication, Army Publishing Directorate, accessed September 16, 2020, <https://armypubs.army.mil/ProductMaps/PubForm/ADP.aspx>.

¹⁷ Doctrine Development Center, *Doctrine Revolution 2020 Report*, ROK Training and Doctrine Command, Daejeon, Republic of Korea, July 2020.

regard, the ROKA does not seem to be on the right track. Given these considerations, it is not difficult to ask why the ROKA's doctrine is difficult for ROK soldiers to internalize. The difficulty tends to get even worse with more abstract doctrine such as operational art. The following theoretical frameworks help to identify reasons why the adoption system does not operate as intended.

Adaptive System Model

Stephen Lauer, a prominent professor in the SAMS, described an adaptive system model as comprised of anticipation, adaptation, and emergence, to articulate how to create and adjust doctrine. For the first phase, anticipation, the model argues that an institution has internal and external discourses regarding history, theory, and previous doctrine, as well as expectations regarding its future warfare. Based on the outcomes of these discourses, during the second phase, adaptation, the institution modifies its doctrine. The outcome can range from subtle revisions to large paradigm shifts. Lastly, in the emergence phase, the institution internalizes the new doctrine to prepare for and execute its anticipated type of warfare.¹⁸ Figure 1 depicts the concept of Lauer's adaptive system model. Importantly, according to the model, internal and external discourse plays a foundational role in creating doctrine. It consolidates the shared understanding of history, theories, enemies, and, above all, how future warfare is expected to unfold.¹⁹ This model implies that discourse enables the members of the institution to internalize newly developed concepts during the adaptation and emergence phases. The more members participate in discourse, and the more protracted and profound those debates and discourses are, the more

¹⁸ Stephen G. Lauer, "The Tao of Doctrine," *Joint Forces Quarterly*, 82, (3rd Quarter 2016): 118-124, accessed November 10, 2020, http://ndupress.ndu.edu/Portals/68/Documents/jfq/jfq-82/jfq-82_118-124_Lauer.pdf.

¹⁹, "The Tao of Doctrine."

members will have a better perception of the doctrine through concrete internalization. This means that members are more than likely ready to take consensual action by the doctrine.

In practice, the ROK Army appears to overlook the importance of internal and external discourses. For example, in the case of the Doctrine Revolution 2020 project, which focused primarily on revising ROKA doctrine in the wake of the US Army’s overhaul of foundational

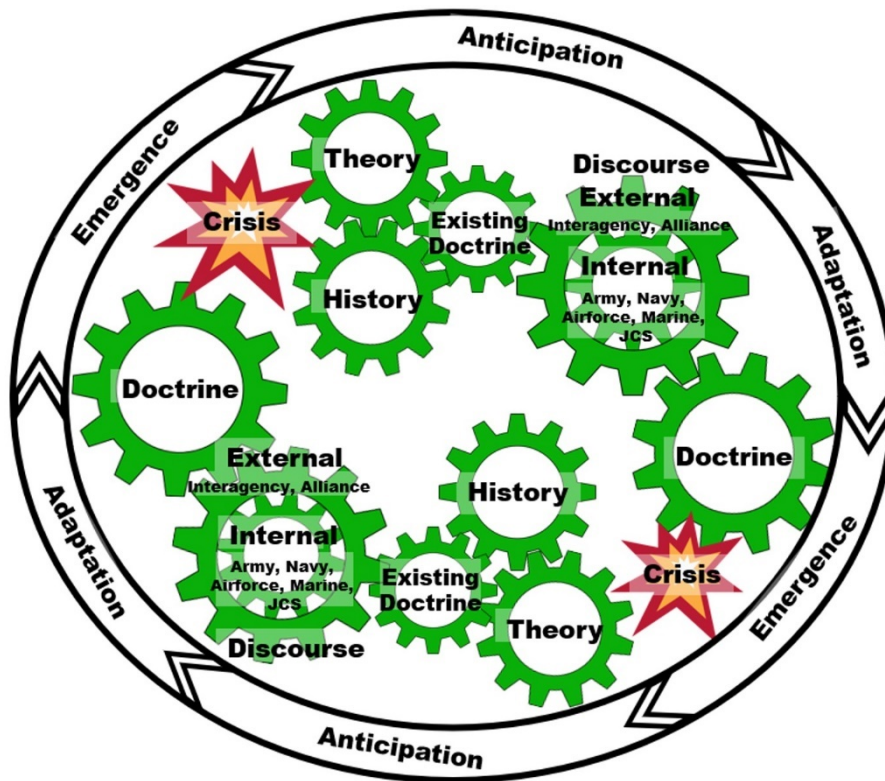


Figure 1. The Concept of the Adaptive System Model, created by the author referring to Stephen G. Lauer’s *"The Tao of Doctrine."*

doctrine in 2019, the ROKA did not seem to exert sufficient efforts to build up discourse. One might argue that the definition of “sufficient effort” varies depending on the size, characteristics, and priorities of institutions. However, the ROKA took less than a month to translate the new US doctrine and report the primarily translation-based revision to the ROK Chief of the Army.²⁰In

²⁰ ROK TRADOC reported to the ROK Chief of the Army in July 2020 about the revised doctrine, primarily derived from the newly published US Army doctrine. It seems that the TRADOC would exert more effort and time on the revision based on the guidance from the ROK Chief of the Army. Doctrine Development Center, *Doctrine Revolution 2020 Report*, ROK Training and Doctrine Command, Daejeon, Republic of Korea, July 2020.

contrast, the US Army presented the Multi-Domain Operation (MDO) concept to the US JCS for national-level discourse in 2017 and is still actively refining the concept with the JCS and sister services.²¹

When compared to the time the US Army committed for its doctrine review and discourse on MDO since 2017, the one month spent on ROKA's Doctrine Revolution 2020 cannot help but create concerns about thoroughness. Such a brief period might be sufficient to have internal discussions within ROKA's Training and Doctrine Command (TRADOC) or at the Army level to establish a common understanding of the US concept. Still, it is safe to say that this short duration and associated effort were insufficient to generate the internal and external discourses that Lauer described. Additionally, the ROK Doctrine Development Center (DDC) in TRADOC held the "20-6 Doctrine Development Conference" with the ROK Mission Command Center in May 2020. The minutes of the conference make clear that changes in US doctrine were the primary driver for how and why ROK doctrine needed to be revised.²² Statistically, ten revisions out of ten revisions stem from the US Army Doctrine Publications (ADP) and their translations.

By Lauer's model, the ROKA should revise its doctrine, as a part of the adaptation phase, based on results of anticipating change, which are founded in the analysis of history, theory, and the enemy—or the discourse concerning at least one of the three—which would lead to the development of their own theory of future warfare. Per Lauer, doctrine is "the result of discourses to an institution's perception of its own historical continuity in action, pending its next

²¹ US Training and Doctrine Command, TRADOC Pamphlet 525-3-1, *The U.S. Army in Multi-Domain Operations 2028* (Fort Eustis, Virginia: US Army Training and Doctrine Command), F-1, accessed November 10, 2020, https://www.tradoc.army.mil/Portals/14/Documents/MDO/TP525-3-1_30Nov2018.pdf

²² ROK Doctrine Development Center, *20-6 Doctrine Development Conference* (PowerPoint presentation, ROK Training, and Doctrine Command, Daejeon, Republic of Korea, May 21, 2020), slide 2-18.

engagement."²³ Therefore, it is more than likely that the ROKA process for doctrine revision does not fit his theory. Moreover, considering the current mode of doctrine adoption of the ROKA, one could contend that the ROKA has its doctrine based on its perceptions of the US Army, rather than the history, theory, enemy, and discourse related to the Korean people.

Social Construction of Reality

Berger and Luckmann theorize how humans, as "social products," construct their society by conceptualized steps, composed of externalization, objectivation, and internalization in order.²⁴ They argue that language is a way of objectivation but offers the most substantial method to convey aggregated knowledge and experience in linguistic society.²⁵ Thus, this knowledge can be defined as "the heart of the fundamental dialectic of society," which means the internalized beliefs recognized by socialized people.²⁶ It indicates that the language contains its own inherent social context, a context that one who is not in the linguistic society hardly recognizes compared to an indigenous member.

One might want to argue that the ROKA's adoption of translations of US Army doctrine presents no issue because US Army doctrine is the result of lengthy internal and external discourses. However, the nature of generating discourse is relevant to the social construction of reality perceived by an institution, which is the US Army in this case. The US Army's doctrine, written in English can be said to be objectivated language established by an American military institution. Therefore, as an institutionalized language, US Army doctrine includes sedimented knowledge and experience related specifically to the US Army. This implies that even if one translates the doctrine literally into a different language, it is hard to understand its actual

²³ Lauer, "The Tao of Doctrine."

²⁴ Peter L. Berger, and Thomas Luckmann, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge* (New York: Anchor Books, 1966), 60-62, 129.

²⁵ Berger and Luckmann, *The Social Construction of Reality*, 67-69.

²⁶ Berger and Luckmann, *The Social Construction of Reality*, 65-66.

meaning within the translated language fully. To better understand it, one needs to know the historical knowledge beyond the contextual meaning in the linguistic community.

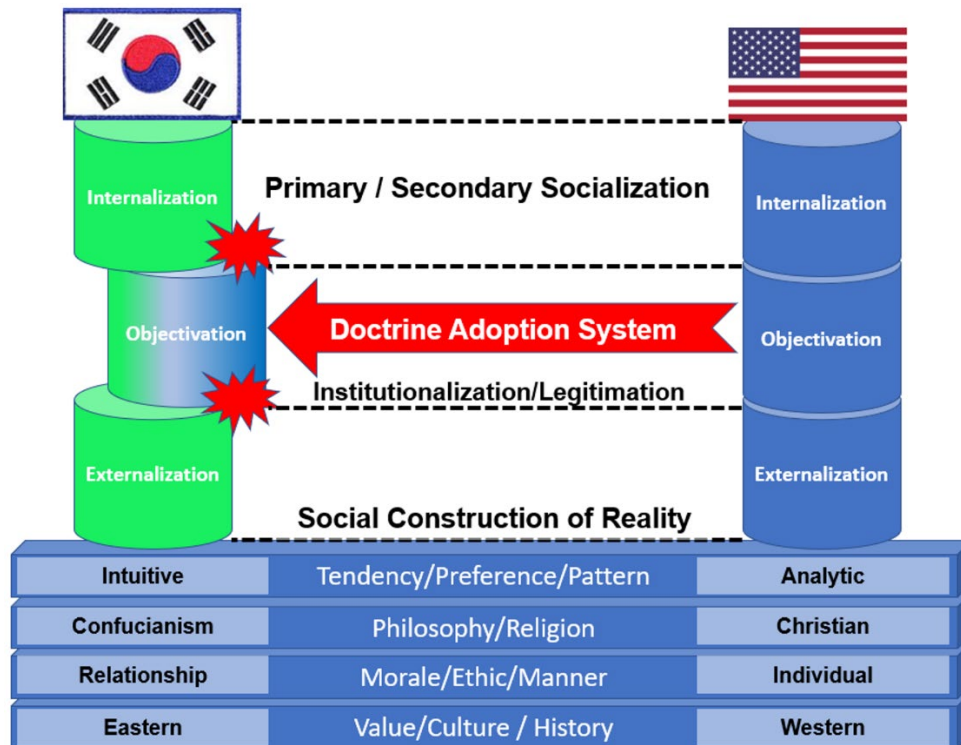


Figure 2. The Pitfall of ROKA Doctrine Adoption using Berger and Luckmann's Theory. Created by the author.

Burger and Luckmann theorize primary and secondary socializations as the major internalization procedures. According to them, for secondary socialization, one should have an awareness of internalized terminologies and unspoken rules in an institution.²⁷ US Army doctrine, for example, consists of institutionalized language created by the members of the US Army. These members are more than likely to succeed in their internalizations, including the primary and secondary socializations. When they write their doctrine, Americans express their thoughts in ways that follow their own socialization. Therefore, the intended meaning of doctrine is recognizable solely by those who have been through the primary and secondary socialization, both living in the US and being in the US Army, respectively. It is unlikely sufficient to

²⁷ The primary socialization is the first socialization to be a member of society, whereas the secondary is for socialized persons to be members of a new sub-world of society. Ibid., 129-131, 138-139.

understand the internalized meanings of the doctrine, even though one can translate it into different languages. Instead, it is more essential to the understanding of this doctrine the degree to which one has or has not completed these socializations. Thus, one can argue that even if the ROKA adopts US Army doctrine by translating its literal meaning, the ROKA could end up not fully recognizing intended meanings unless they fulfill these same socializations. Because both the ROKA and the US Army are "military institutions," the ROKA might consider that the US Army's secondary socialization is similar in light of the interactions between the two Armies for more than seven decades. However, the gap associated with languages, culture, and social constructions of reality, based in the subconscious, will not go away merely from wishing to grasp the true meaning of the doctrine. Furthermore, while ROKA strives to plan and execute operations in ways complementary to their US partners, its unique socialization means that when ROKA members internalize translated US doctrine, it likely confuses ROKA personnel at best, or, in the worst case, could lead to unintended outcomes.

As stated above, the mere translation of the doctrine, which is the product of institutionalized objectivation, is not sufficient for ROKA doctrine and its materialization across the force. Instead, the ROKA should adapt US descriptions within their own cultural context, not just to fill the gap of internalization but also to be able to create the necessary discourse on the doctrine, especially operational art. The ROKA should recognize that there are unseen obstacles to internalizing translated US doctrine because of the different social constructions of reality, such as different languages and the socialization associated with the two armies. Therefore, the ROKA should review its current adoption system to establish the discourse phase as an imperative process, making use of its own unique history and theories to adopt US doctrine. The last section will discuss these recommendations further. Still, first, we must examine the history of operational art, mainly as perceived by the US Military, to then address how this concept might apply to the ROKA.

Operational Art

History

After the French Revolution, nation-state war capabilities increased in terms of ends, ways, and means. War extended beyond the physical observations of commanders in battles. For overarching strategic objectives, multiple actions demanded alignment, which was more important than the victory of a single military action. Along with technologies such as railroads and telegraphs, the depth and duration of war increased in the nineteenth century. In this context, as Robert M. Epstein and James Schneider respectively contended, it was Napoleon or US Civil War generals that initiated practices that we would today describe as operational art for the first time. Other historians contend that while operational art existed earlier, it was military theorists in the Soviet Union that first conceptualized the idea of operational art during the interwar period.²⁸ As other major actors did in the two World Wars, the US renovated educational and doctrinal systems and researched the concept of operational art based on the lessons learned of the Great War. However, due to the advent of nuclear weapons at the close of WWII, the necessity of operational art for conventional warfare virtually disappeared until “the doctrinal renaissance” in 1982.²⁹

Within FM 100-5, issued by the US Army in 1982, the levels of war included the operational level as “the theory of larger unit operations with Air-Land Battle concept.”³⁰ In the next release of FM 100-5, the first US definition of operational art appeared, describing the concept as the employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization, and conduct of campaigns and major operations.”

²⁸ Bylthe Jr, “A History of Operational Art,” 37-39.

²⁹ Michael R. Matheny, *Carrying the War to the Enemy: American Operational Art to 1945* (Norman: University of Oklahoma Press, 2011), Introduction xiii – xviii.

³⁰ Van Creveld and Olsen, *The Evolution of Operational Art from Napoleon to the Present*, 155.

It further described that “the essence of operational art is the identification of the enemy's operational center of gravity and the concentration of superior combat power against that point to achieve decisive success.”³¹

There are obvious distinctions between strategy, operational art, and tactics in the doctrine, which confined operational art to the operational level. In 1993, the US Army expanded the range of operational art, articulating that “No specific level of command is solely concerned with operational art,” emphasizing operational art’s role in linking theater strategy and tactical battles and engagements.³² However, the FM 3-0 of 2001 reversed the expanded range of operational art merely to the operational level. Moreover, it delineated operational art as being different from tactics in terms of scope and range.³³ Similarly, in 2008, FM 3-0 first used “military art” as a term applicable to all levels of war, while operational art remained only for the operational level. Furthermore, it revised the definition as “the application of creative imagination by commanders and staffs – supported by their skill, knowledge, and experience – to design strategies, campaigns, and major operations and organize and employ military forces.”³⁴ Given the emphasis on one’s talents, such as skill, knowledge, and experience, this definition establishes the present doctrinal foundation of applying operational art that we understand today.

After 2010, the US Army maintained a similar stance to operational art as found in FM 3-0. More significantly, FM 5-0 introduced the well-defined concept of “design” to practice

³¹ US Department of the Army, Field Manual 100-5, *Operations* (Washington DC: Government Printing Office, May 1986), 10.

³² US Department of the Army, Field Manual 100-5, *Operations* (Washington DC: Government Printing Office, June 1993), 6-2.

³³ US Department of the Army, Field Manual 3-0, *Operations* (Washington DC: Government Printing Office, June 2001), 2-3. 5-3.

³⁴ US Department of the Army, Field Manual 3-0, *Operations* (Washington DC: Government Printing Office, February 2008), 6-1, 4, 5.

operational art.³⁵ In 2016, the US Army used ADP 3-0, to again expand operational art across levels of war and stressed the importance of the arrangement of tactical actions for a strategic objective.³⁶ This implies that, as of 2016, operational art became applicable to all formations, thus transcending the operational level.

Definition and Functions

The US Army today defines operational art as "the cognitive approach by commanders and staffs – supported by their skill, knowledge, experience, creativity, and judgment – to develop strategies, campaigns, and operations to organize and employ military forces by integrating ends, ways, and means." It emphasizes applying "skill, experience, and judgment" and serving two main functions, "to ensure that military actions are aligned with, and directly support strategy," and "to ensure that tactical actions occur under the most advantageous conditions possible."³⁷ In this definition, strategies, campaigns, and operations are how objectives are achieved, while military forces constitute the means. In fact, as a cognitive approach, "integrating ends, ways, and means" include previous words except "supported by their skill, knowledge, experience, creativity, and judgment." The doctrine reiterates "the applying" as the essence of operational art in the next sentence. It means the "use" of commanders' and staffs' sets of skills, knowledge, experience, creativity, and judgment are an important key to succeed in operational art. The "use" likely includes applying and being supported. In this sense, Clausewitz mentions that art is "a developed capacity" and the practice of talent.³⁸ According to his theory, the set of skills,

³⁵ US Department of the Army, Field Manual 3-0, *Operations* (Washington DC: Government Printing Office, February 2011), 7-1; US Department of the Army, Field Manual 5-0, *The Operations Process* (Washington DC: Government Printing Office, March 2010), 3-1 – 15.

³⁶ US Department of the Army, Army Doctrine Publication 3-0, *Operations* (Washington DC: Government Printing Office, November 2016), 4-5.

³⁷ The definition refers to those of JP 5-0 *Operation*. US Department of the Army, Army Doctrine Publication 3-0, *Operations* (Washington DC: Government Printing Office, July 2019), 2-1.

³⁸ Carl von Clausewitz, *On War*, Edited and translated by Peter Paret and Michael Howard (Princeton: Princeton University Press, 1984), 14.

knowledge, experience, creativity, and judgment could be both the capacity and the talent. To put the definition simply, operational art can be defined as the cognitive approach of commanders and staff by using their military capacity to integrate ends, ways, and means.

The two functions of operational art, as mentioned above, highlight not only its connecting function of tactics to strategy but also its shaping function to achieve assigned tasks. Few are likely to deny that simultaneously executing the two functions should occur, and the failure to achieve such simultaneity indicates an incompetent operational artist. In other words, the two functions seem like the prerequisites needed for successful operational art. Regarding simultaneity, one can restate the two functions as one function to ensure military actions occur under the most advantageous conditions and are aligned with and support strategy.

The US Joint Staff recently expanded the definitions of operational art. In the draft version of Joint Publication (JP) 3-0, *Campaigns and Operations*, the US Army definition becomes a part of the joint definition for planning. The execution phase defines operational art as the ability or skill to adapt to a continuously changing environment while anticipating the future and conducting decision-making.³⁹ This is more likely to reflect the natures of war operational artists would experience in reality on the definition. As previously argued with Clausewitz's quotation, the JP specifies the identity of operational art as the capacity, which is linked to the part of the Army definition as "being supported by commanders and staffs' skill, knowledge, experience, creativity, and judgment." Consequently, one can recognize the artistic aspect appears to be a focal point for the doctrinal concept of operational art. Applying the talent for operational art is an immutable cognitive action regardless of operations phases.

³⁹ US Joint Staff, Joint Publication Draft Version 3-0, *Joint Campaign, and Operations* (Washington DC: Government Printing Office, March 2020), 325.

Characteristics

According to current US doctrine, operational art has four characteristics: creativity, anticipation, cooperativity, and complementarity with the science of operations. First, creativity is used to generate novel ideas and re-examine or fuse previous thoughts by questioning the status quo and seeking changes and flexibility for new perspective in order to solve problems.⁴⁰

Emphasizing creativity, the most recent ADP 3-0 guides the practice of operational art not confined to specific intellectual tools, such as the elements of operational art or principles of joint operations, but by using individual talents.⁴¹ In this regard, US Joint doctrine adds intuition as a kind of talent for commanders to reinforce creative thinking, therefore, forge innovative and adaptive answers. Clausewitz notes that art requires creativity, creativity that operates beyond established rules.⁴² With that, one can argue the creativity is based on one's divergent talents for art, or operational art in this case, to respond to unpredictably changing environment rather than the convergent application of knowledge, such as established doctrine.

Creativity tends to result from combining the known with the unknown through discourse.⁴³ In other words, discourse can be a vehicle to the realm of creativity. Creativity can emerge through discourse that embraces the risk of uncertainty, confrontation, and deconstruction of existing perceptions through continuous candid dialogues with others.⁴⁴ Such a nature is

⁴⁰ US Department of the Army, Army Techniques Publication 5-0.1, *Army Design Methodology* (Washington DC: Government Printing Office, July 2015), 1-6.

⁴¹ US Department of the Army, Army Doctrine Publication 3-0, *Operations* (Washington DC: Government Printing Office, July 2019), 2-1 - 5.

⁴² Clausewitz, *On War*, 148-149.

⁴³ School of Advanced Military Studies, Art of Design Student Text, Version 2.0, (Ft. Leavenworth: School of Advanced Military Studies, 2010), accessed December 17, 2020, https://cgsc.blackboard.com/webapps/blackboard/execute/content/file?cmd=view&content_id=_1082166_1&course_id=_11412_1, 77.

⁴⁴ School of Advanced Military Studies, Art of Design Student Text, Version 2.0, (Ft. Leavenworth: School of Advanced Military Studies, 2010), accessed December 17, 2020, https://cgsc.blackboard.com/webapps/blackboard/execute/content/file?cmd=view&content_id=_1082166_1&course_id=_11412_1, 77.

destructive, challenging, and thus somewhat unacceptable to senior leaders due to the hierarchical culture of the military. That is why the US Army puts heavy value on frank conversation even with higher ranking soldiers, who, in return, should be humble to listen to their junior soldiers, assuming that no one can know everything and even existing knowledge can be flawed.⁴⁵

Without distinction of ranks and positions, this atmosphere for audacious interaction and discourse with others enables a favorable climate and hopefully a culture to prevail in creativity.

Ultimately, through the discourse, creativity supports operational art.

A second characteristic of operational art, anticipation, is critical during execution. It means even with incomplete recognition and information concerning the current environment, a commander should anticipate not only the upcoming situation but also the future influence of decisions up to the strategic level.⁴⁶ On the other hand, it also implies that commanders and staff are aware that it is impossible to have perfect visualization, even with sufficient time and advanced technologies to collect information. Hence, they should be ready to audaciously calculate and accept the risk of imperfectness so as not to lose superior tempo over an enemy. Ultimately, it should lead them to timely decision making and maintaining the initiative.

Cooperativity, the third characteristic of operational art, highlights the need for effective collaboration in assessing and analyzing problems, conditions, opportunities, and risks.⁴⁷ Both US Army and Joint doctrine emphasizes the value of unity of effort by integrating military activities, so-called “Unified Action,” with the US Government (USG) interagency, and

⁴⁵ US Department of the Army, Field Manual Draft Version 5-0, *Planning and Orders Production* (Washington DC: Government Printing Office, December 2020), 1-17 - 18.

⁴⁶ US Joint Staff, Joint Publication Draft Version 3-0, *Joint Campaign, and Operations* (Washington DC: Government Printing Office, March 2020), 28-29.

⁴⁷ US Department of the Army, Army Doctrine Publication 3-0, *Operations* (Washington DC: Government Printing Office, July 2019), 2-1 - 5.

continuing civil-military conversation.⁴⁸ It indicates that continuity likely completes the cooperativity of all actors.

Lastly, US Army doctrine mentions the science of operations as a critical factor that must be entered accounted for within the context of the operational art as early as possible.⁴⁹ Provided technological advances in diverse domains, the importance of integrating the scientific aspects of technology also increases in practicing operational art.

⁴⁸ US Joint Staff, Joint Publication Draft Version 3-0, *Joint Campaign, and Operations* (Washington DC: Government Printing Office, March 2020), 27-28.

⁴⁹ US Department of the Army, Army Doctrine Publication 3-0, *Operations* (Washington DC: Government Printing Office, July 2019), 2-1 - 5.

The Competencies of Operational Artists

What is important beyond the definition, functions, and characteristics of operational art, is how individuals improve their role as competent operational artists. Unlike other literature, such as the joint and US Army doctrine above, one rarely finds recommendations regarding how to improve one's employment of operational art. The doctrine solely describes the operational art from definition to linkage to other doctrinal terminologies. However, there is a clue to indicate how to improve operational art in the doctrine, as stated above. It is the set of skills, knowledge, experience, creativity, and judgment, which can be seen as the capacity and talent for commanders and staff's cognitive approach. The US Army School of Advanced Military Studies (SAMS) demonstrates ways to improve student knowledge and capabilities vis-à-vis operational art during the Advanced Military Studies Program (AMSP). Throughout the course, SAMS presents a wide range of interdisciplinary coursework and then asks students to study "theory, history, doctrine and the practice of operational art" through a series of operational level exercises. The school also emphasizes integrating, synthesizing, and creating students' own theories. The goals for AMSP students are to become agile and adaptive leaders, critical and creative thinkers, and planners capable of generating feasible solutions, even within complex environments.⁵⁰ With that, one can argue that a competent operational artist should possess the capacity and talent rooted in "theory, history, doctrine, and the practice of operational art."

In the development of operational art, one should study a wide variety of theories. Within the curriculum of AMSP, the theories presented are not restricted to the military domain. Instead, these theories include politics, economics, social sciences, and the military arts. The school repetitively teaches theory in diverse ways, such as visualizing, analyzing, and synthesizing.⁵¹

⁵⁰ School of Advanced Military Studies, *School of Advanced Military Studies Program Guides AY 2020* (Ft. Leavenworth, KS: School of Advanced Military Studies, 2020), 7, 11-12.

⁵¹ School of Advanced Military Studies, *School of Advanced Military Studies Program Guides AY 2020* (Ft. Leavenworth, KS: School of Advanced Military Studies, 2020), 9-13.

Approaching theory as the set of skills depicted in the previous doctrine, the group of theories tends to clarify how one should view the world, think as objectively as possible, eliminate biases, conduct synthesis, and create innovative theories to solve problems. As David Epstein states, the broad perspectives are more helpful for innovation than narrow specialization, which produces a "system of parallel trenches."⁵² He warns of the paradox of specialization. Even if specialization in a specific area appears to emerge with a novel solution, it would rather blind diverse perspectives from different angles that may have the novel solution.

On the other hand, learning different theories seems to be equivalent to broadening perspectives. It prevents one from focusing on a specific way and allows one to view the problematic situation objectively, apply relevant theories, and generate innovative solutions. More significantly, it implies that a successful operational artist should be aware not only of required theories but also capable of synthesizing, applying, and connecting them with each other. As Epstein notes, connecting and interleaving, as types of desired difficulties, tend to transform the set of knowledge to more agile and adaptive ones and consequently enhance one's ability to deal with problems. He defines the improved ability as "far transfer."⁵³ Connecting and interleaving are the activities when one applies and synthesizes theories for problem-solving.

Thus, the repetition of the activities reinforces problem-solving ability. Said differently, knowing theories with the "far transfer" ability allows one to have a better problem-solver. When applied to military practitioners, as it is at SAMS, it helps to further develop competency in employing operational art. That is why operational artists should learn theory and know how to synthesize. Importantly, however, students must move beyond theorizing to practical application within the reality of military operations, through historical study.

⁵² David Epstein, *Range: Why Generalists Triumph in a Specialized World* (New York: Riverhead Books, 2019), 22.

⁵³ Epstein, *Range*, 90-92.

Few are likely to deny that history is beneficial and provides indirect for the military practitioner. History is never enough to emphasize great operational artists. John Lewis Gaddis, one of the most prominent historians, states that history plays the greatest role in increasing one's experience, which helps improve "your skills, your stamina...[and ultimately], your wisdom."⁵⁴ In other words, history offers indirect experience with regard to war for military professionals. Because of the nature of war, most will not have extensive direct experience concerning military operations. As time goes by, even direct experiences tend to be volatile if not recorded as history. Thus, war history contains our best record of wars in human history. In this sense, practitioners can use war history to practice planning or decision-making during execution as a means for indirect imagination. By imagination, they visualize the strategic or operational environment, which improves the understanding of complex reality. Besides, this practice enhances skill and insight to plan, prepare, and execute military operations. Thanks to the diverse spectrum of war history, planners have options to choose specific wars. The more one learns war history, and the more the one applies the history to the imagination for practice, the more likely the one can develop the "wisdom," as Gaddis mentioned. Furthermore, this case study-style role of history is helpful not only for providing indirect experience but also for applying and testing theory and doctrine.

Applying theory and doctrine to history, one can gain a better understanding of historical events and, hopefully, be presented with opportunities to further develop theory and doctrine as well. For instance, according to Lauer above, as shown in Figure 1, history, theory, and doctrine are closely linked in the process of adaptation. Using the historical study of war and theories related to war, new doctrinal concepts often emerge to either revise previous doctrine or shift the doctrine in new directions. The new doctrine then guides the military in a future war that will

⁵⁴ John Lewis Gaddis, *The Landscape of History: How Historians Map the Past* (New York: Oxford University Press, 2002) 9, 11.

soon become a part of war history. Theory, history, and doctrine have strong interrelationships with one another in the learning and practice of operational art. Clausewitz recognized this as well, and mentioned that historical events are the foundation to extract military theories and principles.⁵⁵ If one extensively studies historical examples and theory, the doctrine that would result should be based in more consolidated evidence and thus, be more practical in reality. Through this process, operational artists should improve their skill and knowledge regarding war history, theory, and doctrine, which obviously improves their operational art.

The practice of operational art with military exercises at the operational level above tends to strengthen the ability of a planner to employ their operational art. SAMS includes five exercises in the AMSP in order for students to “demonstrate their mastery of operational art” utilizing the set of theory, history, and doctrine they have studied in the course.⁵⁶ It proves that the set of theory, history, and doctrine is the essential source of the power of operational art. By exercising operational art, SAMS expects students to analyze the complex strategic environment and produce viable options. Simply put, by applying the set of knowledge to the exercises, students are supposed to master their operational art. Additionally, the school conducts these repetitive exercises across a range of diverse strategic contexts and geographical environments. This repetition prevents students from obsessing with specific circumstances and perspectives. Instead, this approach is intended to enhance the adaptability of students in applying their operational art to different situations, which also tends to facilitate their critical and creative thinking. Overall, there is little opposition to say that operational artists can improve their competence through the practice of operational art through military exercises.

In summary, this chapter articulates how develop competent operational artists in accordance with theory, history, doctrine, and the practice of operational art. Using the AMSP

⁵⁵ Clausewitz, *On War*, 144, 156.

⁵⁶ School of Advanced Military Studies, *School of Advanced Military Studies Program Guides AY 2020* (Ft. Leavenworth, KS: School of Advanced Military Studies, 2020), 13.

curriculum, it shows how SAMS approaches the effort to forge competent operational artists. In terms of theory, the school expects students to learn diverse theories from different domains other than the military. By doing so, the theories, as tools, increase the students' problem-solving capability and adaptability to a complex situation. War history plays the role of foundations to offer indirect experiences.

Additionally, operational artists apply and synthesize theory and doctrine either to understand or to develop them. With military exercises, they execute the practice of operational art to improve their competence, assuming that they are facing complex problems to solve. Therefore, these studies and activities are more than likely to improve the competence of the operational artist.

The Necessity of Operational Art in the ROKA

As stated above, the simple definition of operational art is the cognitive approach of commanders and staff by utilizing their capacity to integrate ends, ways, and means. This doctrinal concept represents artistic skill rather than science. Therefore, operational art tends to increase critical and creative thinking through its artistic nature. It is more about how planners employ a wide range of measures in order to solve complex problems, in potentially unfamiliar environments. Because of the unpredictability that the ROK military is facing, artistic nature becomes more invaluable to demonstrate creativity. There are few historical cases for them to refer to. More importantly, the ROK strategic environment in Northeast Asia is as complex as various actors are involved; they influence one another; the actors change themselves as the environment evolves.

Consequently, understanding and improving operational art can help the ROKA develop more creativity to solve the complex problems they face. This chapter focuses on two imminent problems that explain why the ROKA needs to understand operational art: Wartime Operational Control Transition (WOCT) and Defense Reforms. It is because these two issues are unprecedented and very complex for military practitioners to readily develop viable solutions, that the need for the creativity and artistic skill of operational art is demonstrated.

Wartime Operational Control Transition

The history of WOCT follows closely with the history of the ROK-US Alliance. During the Korean War, the President of the ROK, Rhee, Seungman, granted the operational command authority of the ROK armed forces General MacArthur, who was designated commander of United Nations forces on July 14, 1950. After the Korean War, that authority became operational control in 1954. With the establishment of Combined Forces Command (CFC) on November 7, 1978, operational control transitioned from the United Nations to the combined US-ROK CFC,

headed by a US four-star general.⁵⁷ The ROK JCS finally assumed peacetime operational control of all the ROK armed forces on December 1, 1994.⁵⁸ This date is the first day of formal establishment of a separate wartime operational control under the auspices of the CFC. At the 38th ROK-US Security Consultative Meeting on October 20, 2006, the two countries concurred with having a transitional period from 2009 to 2012 in order for the ROK armed forces to prepare for regaining the wartime operational control.⁵⁹ One year later, the US Secretary of Defense and the ROK Minister of National Defense specified the end date of the WOCT transition as April 17, 2012.⁶⁰ However, this agreed transition has not been very successful for a variety of internal and external reasons and as a result, full transition has been delayed.

In June 2010, the two presidents agreed to postpone the completion date for transition to December 1, 2015, because of North Korea military provocations and a lagged schedule.⁶¹ As a promising indicator, the two militaries founded a new combined command structure in June 2013.⁶² Nevertheless, a year before completing the WOCT, the two secretaries at the SCM changed the previous WOCT plan to the Conditions-based Operational Control Transition Plan (COTP) in November 2015.⁶³ This was a significant change because the nature of the plan became conditions-based rather than time-based. It indicates that the WOCT would be complete once all required conditions appear verified.

⁵⁷ ROK JCS, *History of Operational Control Transition*, accessed November 28, 2020 <https://www.jcs.mil.kr/mbshome/mbs/jcs2/>

⁵⁸ James E. Hoare, *Historical Dictionary of the Republic of Korea* (Lanham, MD: Rowman & Littlefield, 2020), 47.

⁵⁹ Hoare, *Historical Dictionary of the Republic of Korea*, 58.

⁶⁰ ROK JCS, *History of Operational Control Transition*, accessed November 28, 2020 <https://www.jcs.mil.kr/mbshome/mbs/jcs2/>

⁶¹ ROK JCS, *History of Operational Control Transition*, accessed November 28, 2020 <https://www.jcs.mil.kr/mbshome/mbs/jcs2/>

⁶² Hoare, *Historical Dictionary of the Republic of Korea*, 58.

⁶³ ROK JCS, *History of Operational Control Transition*, accessed November 28, 2020 <https://www.jcs.mil.kr/mbshome/mbs/jcs2/>

The overall procedure of the COTP includes three verification phases, Initial Operational Capability (IOC), Full Operational Capability (FOC), and Final Mission Capability (FMC). The CFC finished the IOC and expected the FOC to be complete in 2020.⁶⁴ However, since the change occurred, the COTP has confronted several internal and external obstacles, even though senior officials, including two presidents, reached agreements to facilitate the plan.⁶⁵ First, changes in the senior ranks of the CFC often result in adjustments to the COTP based on their different priorities. The adjustment usually results in delays or friction in the worst case. For example, after assuming command of CFC in November 2018, General Robert Abrams rejected to the move of the CFC headquarters to the ROK Ministry of National Defense in Seoul, which was a part of the previous plan. Rather, he insisted the CFC had to move down to Camp Humphreys near Pyeong-taek city, where the bulk of US forces are now stationed.⁶⁶ No matter his reasons, one can argue that his revision to the COTP generated unneeded friction and delays.

An example of an external impact on efforts to complete the transition is the pandemic situation caused by the COVID-19 pandemic of 2020. The US and ROK allegedly downsized their periodic combined Combined Command Post Training exercise, due to constraints imposed by pandemic protocols.⁶⁷ This clearly hindered the COTP, especially the FOC phase, which was supposed to be fulfilled by 2020. These are just two examples of internal and external issues that have led to the postponement of the WOCT. Consequently, it is likely to say that those difficulties predicting the future require the practitioners to have more adaptability and creativity to respond against evolving surroundings.

⁶⁴ ROK Ministry of National Defense, *Ministry of National Defense Report 2020*, January 21, 2020, accessed September 14, 2020, <https://www.mnd.go.kr/mbshome/mbs/plan/>, 17.

⁶⁵ ROK JCS, <https://www.jcs.mil.kr/mbshome/mbs/jcs2/> accessed November 28, 2020.

⁶⁶ Keun-hui, Kim, *Why the Combined Forces Command nullifies its moving into ROK MND?*, *MBN news*, accessed November 28, 2020, <https://www.mbn.co.kr/news/politics/3852084>.

⁶⁷ Jibok, Ryu, *ROK-US continues effort to fulfill Wartime Operational Control Transition with the second verification*, *Yeonhap News*, accessed November 28, 2020, <https://www.yna.co.kr/view/AKR20201015008400071?input=1195m>

The WOCT has significant strategic and military implications, even with the problems mentioned above. First, the WOCT plays a foundational role in achieving ROK National Security Strategy. ROK Defense White Paper 2018 delineates National Security Strategy Principles and its strategic tasks. Out of these principles, the WOCT directly supports the second principle, "ensuring strong National Security through the steadfast defense."⁶⁸ Within the White Paper, steadfast defense includes an important theme: "our national defense is our responsibility." The WOCT officially authorizes the ROK military to lead military operations and take responsibility during wartime (see Figure 3). Taking responsibility acts as an exercise in national sovereignty and obligations. Thus, the WOCT helps the steadfast defense be realistically shaped. Among the strategic tasks, the WOCT also helps to carry out the third one, named "taking the initiative to strengthen national defense capabilities based on the ROK-US Alliance."⁶⁹ The WOCT implication that the ROK military would lead the CFC means having a ROK four-star general take command, with a US four-star general being the deputy commander. In this sense, the change in command and control relationship means a way of taking the initiative in the third strategic task.

Second, the WOCT is a critical step to execute the 2018 US National Security Strategy. The White House emphasizes "encourage aspiring partners" as a part of the fourth pillar, implying that the US helps its partners become more robust by sharing responsibility and believes it supports US national interests in the region.⁷⁰ In other words, by sharing the responsibility, the partners become more independent and contribute to increased regional stability aligned with the

⁶⁸ ROK Ministry of National Defense, *National Defense White Paper 2018* (Seoul, Republic of Korea: National Defense Printing Office, February 2019), 34-35.

⁶⁹ ROK Ministry of National Defense, *National Defense White Paper 2018*, 34-35.

⁷⁰ US White House, *National Security Strategy of the United States of America 2017* (Washington DC: US White House, December 2017), accessed November 28, 2020, <https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf>, 38-39.

US national interests. Therefore, one can contend the WOCT is a way of taking responsibility and strengthens the ROK military with the leading role in the ROK-US alliance.

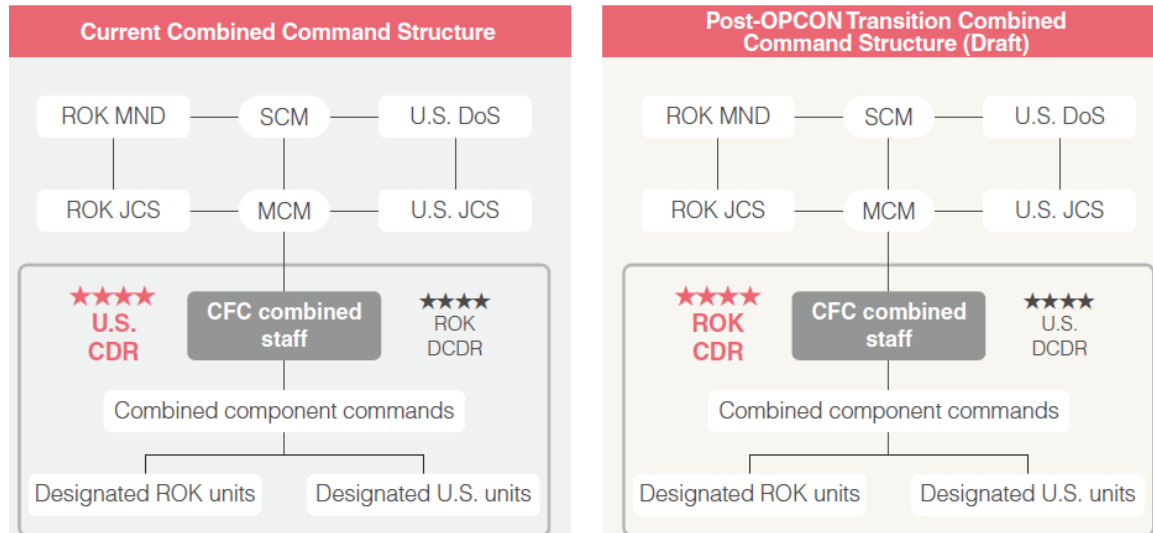


Figure 3. Post Operational Control Transition Combined Command Structure, ROK Ministry of National Defense, *National Defense White Paper 2018* (Seoul, Republic of Korea: National Defense Printing Office, February 2019), 133.

Lastly, the WOCT is a symbolic transition for the leading role and a practical milestone for innovation, ultimately associated with ROK military reforms. One might want to insist that the practical change of the WOCT is to change the nationality of the commanding general of the CFC from the US to the ROK. This is a very superficial analysis that underestimates the real value of the WOCT. A ROK general becoming the CFC commander implies that the ROK side takes the initiative and leads most of the commander and staff activities in the CFC. There is little doubt that this approach is likely to create space for innovation because the leading role for wartime operations has belonged to the US side since the Korean War. For the ROK side, it is the deconstruction of a previous framework and the transformation of how to view military operations in the Korean peninsula.

Having said that, this transformation requires the ROK military to develop its planning capability for wartime, which the ROK side has not led before. It means that in practical terms,

the ROK needs to be fully in charge of planning, preparation, and execution for wartime once the WOCT ends. To do so, the ROK military needs to have more innovative capabilities for the leading role in the CFC. US Army Techniques Publication 5-0.1, *Army Design Methodology* (ADM) states that creative thinking enables leaders to produce innovative ways by challenging the previous paradigm so that they can specify the upcoming future and shape desired conditions.⁷¹ Knowing that the ADM is a supportive tool for operational art, the ATP designates creative thinking as a critical concept for the ADM and expects it to play a critical role in establishing a novel solution. Therefore, one can argue that operational art satisfies innovative requirements of the WOCT by its artistic nature and creative thinking.

Given the historical and military implications identified above, the WOCT is inherently difficult process with inevitable and unpredictable obstacles. However, it is a conducive step to the ROK and US National Security Strategies. More significantly, the innovative nature of the WOCT for the ROK side requires creative thinking for novel solutions. Overall, it is easy to conclude that operational art is necessary to deal with the complex problems in the WOCT and to help the ROK military create innovative solutions for the completion of the WOCT.

Defense Reforms

At the 2018 annual military conference held at the ROK Ministry of National Defense (MND), ROK President Moon, Jae-in emphasized the importance of “Defense Reforms 2.0” and asked the ROK military to be reborn as a stronger military against all domain threats and a more reliable national institution for the public.⁷² Based on this presidential guidance, the ROK MND modified its previous Defense Reform plan and rebranding it as "Defense Reforms 2.0" in

⁷¹ US Department of the Army, *Army Techniques Publication 5-0.1, Army Design Methodology* (Washington DC: Government Printing Office, July 2015), 1-6.

⁷² ROK Ministry of National Defense, *Defense Reforms 2.0* (Seoul, Republic of Korea: National Defense Printing Office, February 2019), 2.

February 2019.⁷³ In conjunction with the 2018 National Defense White Paper, the new Defense Reforms demonstrate how the MND recognizes the strategic environment and how it executes the reforms to fulfill its assigned missions. The objective of the reforms is to become a "strong military" to support the peace and prosperity of the ROK. For the MND, "strong military" has three meanings: taking the initiative to proactively respond to security threat; creating an advanced technology-based military; supporting the status of a developed country.⁷⁴ The reforms plan consists of five parts: military structure, defense development, welfare system, defense industry, and budget.⁷⁵ Out of these five parts, this chapter primarily focuses on the military structure as a means to demonstrate why operational art is necessary for the ROK military.

Based on the reforms, the ROK MND states that the previous threat was North Korea with its conventional forces, Weapons of Mass Destructions (WMD), and nuclear weapons. Still, the threat has evolved and expanded to include transnational and non-military actors.⁷⁶ This indicates that the strategic environment has become both more complex and occupied by more, unpredictable stakeholders. Accordingly, interdependence and interrelationship within internal and external actors turn out to be increasingly important. This differs from a traditional perspective, mainly concerned with the North Korea threat, such as its military and non-military provocations, its conventional forces, and its strategic military capabilities. Under this recognition of strategic threats, the ROK MND is transforming its structure in the following two ways: an advanced technology-centered military in all domains and an initiative-taking military.

First, the reforms seek to transform military structure by advanced technologies in all domains. The ROK military, previously called an Army-centered and personnel-based military, is striving to develop the military technologies of all services based on its promising economy and

⁷³ ROK Ministry of National Defense, *Defense Reforms 2.0*, 64.

⁷⁴ ROK Ministry of National Defense, *Defense Reforms 2.0*, 4.

⁷⁵ ROK Ministry of National Defense, *Defense Reforms 2.0*, 14-15.

⁷⁶ ROK Ministry of National Defense, *Defense Reforms 2.0*, 16-18.

defense industry in order to be technology-centered military.⁷⁷ For example, the number of active forces will decrease from approximately 600,000 to 500,000 by 2022. Meanwhile, the annual investment for defense technology has gradually increased from 31.3% of the annual defense budget to 36.5% since 2019.⁷⁸

Indeed, the transformation appears to be proceeding with success to some extent. *Military Balance* 2020, a prominent global military journal, states that the ROK military is well-equipped with new technologies and possesses developed defense industries for major military requirements.⁷⁹ Additionally, to be an all-domain-integrated military, the ROK military is enhancing its technologies, especially focusing on the Air force and Navy. ROK Air Force continues the acquisition of F-35As and Global Hawk high-altitude surveillance unmanned aircraft from the US, and the Navy has a plan to field next-generation submarine and light aircraft carrier produced by its own defense industry.⁸⁰ These examples of development suggest a strengthening of military power and an expansion of the area in which the ROK military is capable of conducting operations.

Overall, it indicates that the ROK military is evolving and expanding with advanced technologies across diverse domains. John P. Kotter, a professor well-known for leadership in Harvard Business School, points out that if an organization becomes larger with high technologies, diversity and interdependence tend to grow; therefore, conflicts and tensions around the organization inevitably emerge, even at unpredictable places and times.⁸¹ Based on Kotter's

⁷⁷ ROK Ministry of National Defense, *Defense Reforms 2.0*, 4,22

⁷⁸ ROK Ministry of National Defense, *Defense Reforms 2.0*, 29, 31

⁷⁹ The International Institute for Strategic Studies, *The Military Balance: The Annual Assessment of Global Military Capabilities and Defense Economics* (London, UK: Arundel House, February 2020), 287.

⁸⁰ ROK Ministry of National Defense, *Ministry of National Defense Report 2020*, January 21, 2020, accessed September 14, 2020, <https://www.mnd.go.kr/mbshome/mbs/plan/>, 4.

⁸¹ John P. Kotter, *Power and Influence: Beyond Formal Authority* (New York: The Free Press, 1985), 24-29.

theory, the ROK military will confront such conflicts and tensions or might even be experiencing them already, but without recognition. Due to the inevitability and unpredictability of change, it is fair to say that the traditional way of thinking that the ROK military has used in the past will not be as useful as before. Rather, the ROK should exert more effort in increasing creativity, anticipation, and cooperativity, which are the characteristics of operational art stated above. Thus, operational art is conducive to dealing with obstacles on the way of the reforms.

Second, the reforms envision the ROK military to be an “initiative taking military.” The first step was to establish Ground Operations Command (GOC) in January 2020, combining with First ROK Army, Third ROK Army, and Wartime Ground Operations Command of the CFC.⁸² The step has implications in that the GOC has simplified the C2 system and assume responsibility to lead ground operations during all operations processes. Thus, the GOC would operational control not only the ROK and US ground forces but also expected ground units from other United Nations partners. Considering the numbers of soldiers and units found in the ROK and US Army, the inclusion of all these forces and those of UN partners means that by the GOC will be inherently complex. In terms of planning and execution capabilities, the expertise needed definitely requires operational art. The second steps are the WOCT and structural reforms in the CFC. Upon completing the WOCT, the reforms envision that the ROK is ready to take the initiative and lead military operations in the Korean peninsula. Importantly, these major reforms increase the necessity of operational art not just for the control of forces in execution, but also in how to prepare the force for an uncertain future.

In sum, based on the reforms, traditional perspectives, North Korea focused threat, and Army based military are on the shift to transnational threat and all domain forces. It assumes that the traditional approach is not sufficient to resolve domestic and international conflicts anymore. Current perspectives tend to rely on the past and experience rather than encourage critical and

⁸² ROK Ministry of National Defense, *Ministry of National Defense Report 2020*, 4.

creative thinking. However, as presented earlier, the ROK military is already on the reforms, expanding and diversifying the military with high technologies. It means that there are unidentifiable changes and conflicts waiting. In order to adapt and resolve the changes and conflicts with viable options, the ROK military should utilize the creative nature of operational art with more open-mindedness.

Recommendations

This chapter suggests recommendations for the ROK on how to adapt and improve its practice of operational art. These recommendations will use the US Army's capabilities development framework as a means to organize recommendations. That framework includes the commodity areas of: doctrine, organization, training, material, leadership and education, personnel, and facilities, routinely abbreviated as DOTMLPF. Because of space requirements, the recommendations here will focus on the doctrine and leader development and education domains.

The ROK military should foster a more favorable discourse culture to create its own doctrine and develop an understanding of operational art. According to Lauer, an institution applies discourse to perceive history; consequently, the discourse helps to create doctrine for future warfare.⁸³ SAMS also emphasizes that the purpose of discourse is to facilitate understanding and spur creativity by combining the known with the unknown.⁸⁴ Thus, it is self-evident that discourse is necessary for a military institution to both understand and create its own doctrine. Moreover, this discourse would certainly help the ROK military improve its understanding of operational art and create its own doctrine beyond the mere translation of US doctrine. However, there is a cultural barrier to constructive discourse for the ROK military as an institution born of Asian society. That barrier is the Asian propensity to avoid debate, which stands in sharp contrast to their Western counterparts. While westerners have conviction regarding the benefits of "the free marketplace of ideas," easterners culturally tend not to avoid discord, especially with those who, they think, are higher than them, seeing such disagreement as

⁸³ Lauer, "The Tao of Doctrine."

⁸⁴ School of Advanced Military Studies, Art of Design Student Text, Version 2.0, (Ft. Leavenworth: School of Advanced Military Studies, 2010), accessed December 17, 2020, https://cgsc.blackboard.com/webapps/blackboard/execute/content/file?cmd=view&content_id=_1082166_1&course_id=_11412_1, 77.

a sign of disrespect.⁸⁵ This culture prevails in the ROK military and discourages constructive discourse, so as not to be seen rude by others. Having said that, this monograph suggests practical steps to shape desirable conditions for discourse, in order to overcome these cultural obstacles.

The first step for fostering frank internal discourse is to encourage soldiers to exchange their ideas through diverse channels, such as military journals or conferences. The ROK military should create a variety of venues to increase opportunities for feedback from below. During these opportunities for the discourse, senior officers should be willing to accept the constructive observations of their juniors, while abandoning their overreliance on experience. One should keep in mind David Epstein's warning that "highly credential experts can become so narrow-minded that they actually get worse with experience, even while becoming more confident – a dangerous combination."⁸⁶ He seems to point out the danger of an obsessive deference to experience and the rigid atmosphere such deference creates, which silences constructive feedback from below.

The second step is to guarantee sufficient time for such discourse. Koreans tend to be in a hurry and want to see achievements made as fast as possible. It seems that they sometimes do not care about what actually exists inside, and instead value the superficial. It is often called "a tracer mode," meaning that the ROK, having been a developing country for many decades, has clung to the approach of following western civilizations without giving deep consideration to their own culture, virtue, ethnicity, and people. One could argue that this tendency has let the ROK uncritically accept whatever comes from the Western world as soon as possible. Such a tendency likely affects creativity and the willingness of individuals to engage in their own creative thinking. The ROK has to overcome these tendencies, especially in the military. Within this environment, discourse will not work for the institution as it should, especially without abundant

⁸⁵ Richard E. Nisbett, *The Geography of Thought: How Asians and Westerners Think Differently and Why* (New York, NY: Free Press, 2004), 194 ~ 196.

⁸⁶ Epstein, *Range*, 20.

time. Collision and compromise of different ideas are critical sequences of discourse.⁸⁷ It is not just collecting consensus but overcoming and compromising difficulties within an institution. Using Epstein's theory, desirable difficulties make learning slow but ensure knowledge is durable, which is known as deep learning.⁸⁸ It means that even if discourse causes a delay with desirable difficulties of colliding ideas, it is a valuable path that no one cannot skip to approach deep learning. Therefore, the ROK military should find sufficient time to facilitate the discourse even with difficulties and create its own doctrine reaching its deep learning. Sufficient time can be varied based on perspective. However, one can strongly argue that a month of discourse is not enough to revise most of the whole army's doctrine, including doctrinal structure.

The last step is the need for senior members of the ROK Army to set the example. SAMS contends that “discipline, suspension of disbelief, and the ability to listen” are requirements for the practice of discourse.⁸⁹ These requirements should be where senior members of the military set the example first. For instance, seniors military members should encourage their juniors to speak up with critical questions and ensure that they are fully prepared to listen to those juniors. Such small actions can play the role of catalyst to shape a sound institutional culture that values discourse. The three steps above may seem overly simple but can have an outsized impact on establishing favorable conditions for discourse within the ROKA. More importantly, this discourse can only help in the development and understanding of doctrinal concepts, such as operational art, and ensure they are embraced by ROK soldiers.

⁸⁷ School of Advanced Military Studies, *Art of Design Student Text, Version 2.0* (Ft. Leavenworth: School of Advanced Military Studies, 2010), accessed December 17, 2020, https://cgsc.blackboard.com/webapps/blackboard/execute/content/file?cmd=view&content_id=_1082166_1&course_id=_11412_1, 77.

⁸⁸ Epstein, *Range*, 81-82.

⁸⁹ School of Advanced Military Studies, *Art of Design Student Text, Version 2.0* (Ft. Leavenworth: School of Advanced Military Studies, 2010), accessed December 17, 2020, https://cgsc.blackboard.com/webapps/blackboard/execute/content/file?cmd=view&content_id=_1082166_1&course_id=_11412_1, 78.

The ROKA should invest more time and effort in its own war history and military theory since, as Lauer describes, doctrine emerges through history and theory. As stated above, expanding one's knowledge of history and theories enhances the capacity of talent, thus improves one's operational art. With that, war history and military theory of Korea are imperative foundations for discourse and emerging doctrine. These are deeply tied to culture, ethnicity, geography, and strategic environment, and Koreans have to consider how these differ from those of their US partner, even within the context of their shared history. The ROK fought the Korean War in their territory for almost three years. Yet, the Joint Forces Military University, a major institution for professional military education in Korea, teaches Korean War history for less than a week during Joint Basic Regular Course, the Korean equivalent to the US Command and General Staff Officer Course (CGSOC).⁹⁰ Additionally, the ROKA executes large-scale combined training, especially at the Korea Combat Training Center and Battle Command Training Center, which results in lessons learned that are valuable and suitable for the ROKA. One can argue that the lessons learned can fill a lack of recent war history and will reflect the current trends of the ROKA. In the case of military theory, the ROK should exert more effort to research Korean military theorists from ancient dynasties in conjunction with Western military theorists. Joint Forces Military University in the ROK has several PME courses. However, they do not have regular classes concerning military theory but only a few taught as electives for those who want to learn in person.⁹¹ Emphasizing war history and military theory could improve the army's operational art, molding it in a more Korean way and providing a concrete basis for discourse and unique doctrine.

⁹⁰ Joint Forces Military University, The Introduction of Educational Curriculums, accessed December 28, 2020, <https://jfm.mnd.go.kr/user/indexSub.action?codyMenuSeq=70193&siteId=jfm&menuUIType=sub>

⁹¹ Joint Forces Military University, The Introduction of Educational Curriculums, accessed December 28, 2020, <https://jfm.mnd.go.kr/user/indexSub.action?codyMenuSeq=70193&siteId=jfm&menuUIType=sub>

Finally, the ROK should modify its PME programs to improve creativity. Creativity is one of the key characteristics of operational art. Creativity starts from an active open-minded attitude that allows for a flexible perspective.⁹² However, the PME programs in the ROK seem to have rigid customs, such as teaching by rote in pursuit of the so-called “school solution.” In fact, every discussion in class and practical exercises tends toward specific answers sought by instructors. These answers are the standards on which student performance is graded. Naturally, students hastily seek the “right” answers without critical thinking or doubt, and thus, do not build upon their own thoughts or logic. Students tend to consider whatever instructors say as potential answers to get better scores and evaluations. To make it worse, military students are very concerned that presenting their own ideas might actually degrade their assessed performance if they do not think like their instructor. This phenomenon is detrimental to critical and creative thinking. Ultimately, ROKA PME programs might force students to be more narrow-minded with less creativity once they complete their PME. To make a more favorable culture for competent operational artists, the ROK should change the culture and policies that shape military education. Viable solutions could include the following; eradicating “the answer culture”; encouraging critical and creative thinking with official class; reducing the degree to which quizzes check student memorization; and changing the hierarchical relationship between instructors and students to more one that is more horizontal.

⁹² US Department of the Army, Army Techniques Publication 5-0.1, *Army Design Methodology* (Washington DC: Government Printing Office, July 2015), 1-6.

Conclusion

The analysis presented in the previous chapters can be summarized as follows. The ROK military adopts the doctrinal concept of operational art solely on the basis of a literal translation of US doctrine. The translation makes it difficult for ROK soldiers to internalize the concept of operational art mainly because of the lack of discourse and a different social construction of reality. Operational art as it is found in the US military can be defined as the cognitive approach of commanders and staff by utilizing their military capacity to integrate ends, ways, and means. The characteristics are creativity, anticipation, cooperativity, and complementarity with the science of operations. Operational art can be improved by the synthesis of theory, history, doctrine, and through its practice. Given the features of the operational art, the demands of the Wartime Operational Control Transition and associated military reforms necessitate the further development of the concept of operational art for the ROKA.

Three recommendations present above for the ROK military to execute as short and mid-term solutions. First, the ROK military should strive to overcome Eastern culture tendencies that hamper operational. Potential steps to do so are to encourage constructive conversation between senior and junior members of the military, abandon urgent and unquestioning attitudes, and take sufficient time for mature discourse. More importantly, those steps should come through senior military members leading by example, such as throwing critical questions to the juniors and ensuring they are fully prepared to listen to the responses. Second, the ROK military should exert more effort and time to study its own history and military theories. There must be many beneficial lessons that the ROK military can learn from its own history and military theories. Such history and theories are more reflective of Korean culture and tendencies. By studying them, the ROKA can identify unique legacies applicable to the current reality. Lastly, the ROK military should transform its way of teaching in its PME courses to facilitate creativity. Encouraging frank

discussion and the free flow of ideas would be more beneficial for creativity than memorizing “the answer” with one-way teaching led by instructors.

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