



Professor Brian McAllister Linn of Texas A&M, author of *Elvis's Army: Cold War GIs and the Atomic Battlefield*, conducts a seminar 4 May 2018 at Fort Leavenworth, Kansas, with the 2017/18 Art of War Scholars on the U.S. Army's post-World War II transformation to an "atomic army." (Photo by Maj. Ian Kent, U.S. Army)

The Art of War

What the German and American Armies Can Learn from Each Other for the Education of Future Field Grade Officers

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What experience and history teach is this—that people and governments never have learned anything from history, or acted on principles deduced from it.

—Georg Friedrich Wilhelm Hegel

For the first time in U.S. Army doctrinal history, Field Manual (FM) 3-0, *Operations*, names the enemies and adversaries that possess the capabilities to contest and degrade the battlefield across all domains as the "4+1": Russia, China, North Korea,

and Iran as well as radical ideologues and transnational criminal organizations such as the Islamic State and al-Qaida.¹ Those peer and near-peer enemies and adversaries continually challenge the United States in multiple domains and purposefully below the threshold of open conflict or, as retired Lt. Gen. James M. Dubik and Nic Vincent call it, in the gray zone.² This operational environment (OE) has led to permanent competition as well as unprecedented complexity, ambiguity, adversity, lethality, and uncertainty for military leaders across all levels of war.

In the light of those challenges, the U.S. Army Command and General Staff College (CGSC) at Fort Leavenworth, Kansas—the “super tanker” of the U.S. Army officer education system—is currently making a significant change in its direction. And, so is the German equivalent, the *Führungsakademie der Bundeswehr* (FüAkBw) in Hamburg. This year, the CGSC is heading toward a curriculum dominated by large-scale combat operations (LSCO), while the German general staff officer education is changing to more of a think tank-style approach. Both transition processes have a single common impetus for change: higher headquarters externally initiated the change processes. Accordingly, pressure, oversight, and expectations are high. Throughout this transition process, both institutions can learn from each other on how to educate future field grade officers to cope with the challenges of the OE, to plan and execute military operations in that OE, and, ultimately, to function as organizational-level decision-makers.

After graduating from FüAkBw in 2013, I was selected to attend CGSC and, in conjunction, had the unique privilege of also being selected to participate in the Art of War (AoW) Scholar Program. This program selects a cohort of just twelve officers representing three countries and four military services who participate in a specially designed forum consisting of intensive, graduate-level seminars and in-depth personal research focused primarily on understanding strategy and operational art through the vehicle of military history.

Against this autobiographical backdrop of those three types of professional military education (PME), I make the following observations: first, CGSC can learn from FüAkBw how to refine the conduct of exercises; second, FüAkBw can learn from CGSC the value of case studies on leadership and in-depth

historical education; and finally, both institutions can benefit from an education that acknowledges, and focuses on, the art of war as the heart and the soul of the military profession.

Prior to developing those arguments, it is mandatory to get the terms right. Both institutions have the purpose of preparing field grade officers for the next ten to fifteen years of their career; in the German case, maybe even for the rest of their career. At CGSC, the Command and General Staff Officer Course (CGSOC) provides intermediate-level PME to educate and train future field grade officers in agility, adaptability, effective communication, critical thinking, and mission command in complex and uncertain environments. The CGSOC equivalent at FüAkBw, the *Lehrgang General- und Admiralstabsdienst National* (LGAN)—stemming from the long Prussian and German tradition—is meant to educate future *Generalstabs- und Admiralstabsdienstoffiziere* (general and admiral staff officers) over the course

of two years. Despite the common purpose, the two institutions follow a distinctly different methodology. While CGSC is an annual army-centric course for approximately 1,200 resident students at a time, LGAN is a joint course educating only 120 students from all three services of the German armed forces. Beyond the difference in methodology, there are several other differences, mainly cultural, between the two institutions. To explore all those differences would lead beyond the scope of this article. However, one example illustrating a difference is the contrasting view of the commander's role in the operations

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process with the U.S. perspective being commander driven and the German perspective being staff driven.

Apples and Oranges

By now, one particular objection might have already intrigued the reader: A comparison between CGSC educating 1,200 students over ten months with FüAkBw educating 120 students over two years and the AoW scholarship program focusing on only twelve officers in half a year certainly might appear to be a comparison between apples and oranges. The more officers are pushed through an academic environment with limited resources

four-and-a-half working days, our team of sixteen worked through the entire Joint Operational Planning Process (JOPP), including a wargame at the end. As this was the very first time most students applied the JOPP, the significant endeavor was felt by all. FüAkBw, in contrast, grants two full weeks for the same content with a staff consisting of the entire student body of 120. Against this backdrop, a short look at how FüAkBw is structured and conducts exercises might be informative.

The FüAkBw methodology differs significantly from CGSC. The specialty of FüAkBw is its joint

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es in a limited amount of time, the more challenging it gets. In this regard, the CGSC suffers from the principle of mass. A fine orchestration of the curriculum and the approximately 875 in-class hours of instruction is necessary to enable a somehow comparable and standardized education for all 1,200 students, depriving the faculty almost entirely of any kind of flexibility to react to and cover current strategic events with implications for the military instrument of national power. At the same time, despite this problem of mass, comparing and contrasting as well as drawing mutual conclusions regarding the content and curriculum of both CGSC and FüAkBw are mandatory to critically assess and continually improve both colleges. Even more important, the view across the ocean to a sister college can be more informative than just organizational change within one’s own comfort zone and stove pipe.

CGSOC: The Importance and the Conduct of Exercises

To start with a personal example, my first operational-level exercise during CGSC challenged me for two reasons. On the one hand, the restricted time, and on the other hand, my experience from FüAkBw created multiple dilemmas for me as designated leader of the operational planning team. Within only

approach. The CGSC, by working its way down from the strategic via the operational to the tactical level, intends to give students an understanding of how the small wheel of the brigade fits into the bigger picture of the military engine. In contrast, FüAkBw does it the other way around, trying to follow the principle “from easy to difficult” by building on and exploiting the existing personal experience of its students from previous training, assignments, and deployments. The course starts out with a joint phase, where the students complete a common core instruction on social, political, historical, and cross-service topics. The second service-related phase focuses on tactical-level planning and decision-making. For Army students, that means repetitious cycles of the German decision-making process at brigade, divisional, and corps level in all staff functions regardless of branch or military occupational specialty. The corps level exercise is, by the way, the juncture at which the CGSC-FüAkBw exchange program plugs in.

In a third phase, all services are again brought together to progress jointly to the operational level, learning how to plan with and execute the NATO operational-level planning process, and, finally, exercising the process of ministerial decision-making and staff work. As an example, for the full four weeks of operational-level



Students of the 10th Joint Lehrgang General- und Admiralstabsdienst analyze the attack of the Prussian First Army 10 September 2014 during a staff ride to the site of the 1866 Austro-Prussian Battle of Königgrätz, Czech Republic. (Photo by author)

exercises, both planning and executing the NATO operational-level planning process, the students do not only stand up a joint operational planning group, but beyond that, Army students provide the Land Component Command, Air Force students the Air Component Command, and Navy students the Maritime Component Command. Overall, the FüAkBw's comprehensive course structure is necessary as graduates find themselves immediately after the course in billets ranging from brigade G-3s (operations officers) to, in my case, the executive officer to the chief of staff of the German Joint Forces Operations Command.

The general approach of both institutions and the methodology of how exercises are conducted is significantly different, too. At the FüAkBw, in a holistic sense, exercises are exercises, both temporally and physically. Thus, students do not face parallel history, leadership, or force management instructions and assignments and, therefore, can better focus on the exercise. The same is true for the faculty. As the faculty is not occupied by teaching classes and grading papers, staff group advisors and instructors can focus on their core competency of mentoring students in their respective warfighting functions throughout the exercise.

To make the planning effort even more realistic, the FüAkBw reaches out to national and

multinational headquarters, staffs, and branch schools to integrate real-life experience into the college planning exercises. Finally, this effort to simulate realism in exercises reaches its climax with the invaluable guidance and wealth of knowledge provided by a senior mentor, in most cases, a recently retired three- or four-star general, acting as commanding general.

FüAkBw: The Value of Leadership and Historical Education

Consequently, the FüAkBw profits from the added expertise of experienced senior mentors and their insights into aspects of higher command. This necessarily leads to the question of how future field grade officers can actually “learn” leader-

ship and commandship. Personal experience certainly is one side of the coin, which is irreplaceable. The other side are role models and mentors, both contemporary as well as historical. Such role models might be even more important for those in militaries that have mainly been involved in limited contingency operations in the recent past. At the same time, this is also how doctrine evolves—through systematically processed individual and organizational combat experience supported by historical examples and driven by future-oriented concepts. This inherent interrelationship builds the bridge between leadership and historical education and instruction. Tools that help to build that bridge are, for instance, leadership case studies.

Two of many fruitful examples from the CGSC curriculum on how leadership can positively influence difficult situations are British Field Marshal Sir William Slim in the China-India-Burma Theater of Operations in World War II and American Gen. Matthew Ridgway and the Eighth U.S. Army in the Korean War. Such case studies offer a tremendous amount of extremely insightful and powerful leadership lessons, which can inform future field grade officers of how to approach challenging operational and strategic problems in austere environments. Those leadership studies are of even greater importance to the vast majority of military leaders, who are not—as Slim and

Ridgway—“military geniuses,” as Carl von Clausewitz called it, or “great captains,” as Napoleon used to say.³

Dubik argues that leaders at operational and strategic level need to master two theories: first, the theory of war itself; and, second, but equally important, the theory of organizational change.⁴ Notable persons associated with organizational change theory are John P. Kotter (*Leading Change*) and Peter M. Senge (*The Fifth Discipline: The Art and Practice of*

The art of war has many facets. An easy to understand definition by Dubik differentiates between, on the one hand, the science of war, revolving around the physical, quantifiable, and technical aspects, and, on the other hand, the art of war, revolving around applying nonphysical aspects to wage war. Further, he asserts that “operational art describes the practice of using tactical military forces in sequence or simultaneously; in battles, engagements, and maneuvers; and

“Students at both colleges must understand that there is no single mode in conducting the art of war and, subsequently, no single way of war.”

the Learning Organization). According to Dubik, at the strategic and operational level, an organizational leader must first develop his or her own understanding of the theory of war so that he or she can then influence the direction of the military super tanker, to reuse the metaphor from the beginning of this article. Only if the organizational leader is capable of understanding, visualizing, and describing the operational environment properly does he or she become actually capable of developing feasible solutions, or as the military calls it, courses of action. Retired Gen. David Petraeus’s approach to understand, visualize, and describe the conflict in Iraq in 2007 with the guide of the famous counterinsurgency doctrine, FM 3-24, *Counterinsurgency*, is an excellent example of what Dubik apparently asserted.

However, such a combination of the theory of war and organizational theory is currently under-represented at the FüAkBw and would help to refine and guide the college into the direction of a military “think tank.”

CGSC and FüAkBw: The Art of War

The combination of the theory of war with organizational leadership theory leads to the final transformational amalgamation of concepts, which both the CGSC and the FüAkBw should embrace more vigorously—the art of war.

in a campaign or series of campaigns to achieve strategic aims.”⁵ It should be self-evidently obvious how this understanding of the art of war builds a bridge to what U.S. Army Doctrine Reference Publication (ADRP) 3-0, *Operations*, defines as operational art and its related principles.⁶

But why is the differentiation between the art and the science of war so important for future field grade and general staff officers? Critical analysis of the art of war touches the core of the military profession, particularly for officers. Students at both colleges must understand that there is no single mode in conducting the art of war and, subsequently, no single way of war. For example, the American way of war has flowed back and forth between an attritional “first way of war,” as John Grenier argued, and a Prussian influenced annihilation-focused way of war, as so famously suggested by Russell F. Weigley, always considering the “politics of the moment,” as argued by Antulio J. Echevarria.⁷

In the same way as in the United States, other regions and nations have developed their own ways of war, often influenced by cultural tenets, political and social circumstances, revolutions in military affairs, and the influence of indigenous strategic thinkers. Below we consider the three most prominent ways of war:

Chinese. The Chinese way of war has been significantly shaped by Sun Tzu and his *The Art of War*,

which serves very much as the foundation for Chinese strategic thinking.⁸ As a result, the Chinese way of war tends to be generally defensive in nature, characterized by intentionally engaging in protracted conflict and deception with great emphasis on patiently looking for the strategic advantage with the aim of trying to win without fighting by coercing others through multiple means to act in one's own favor. Notably, Mao Tse-tung incorporated many of Sun Tzu's ideas in the precepts explained in *On Guerilla Warfare*, which were employed to set the stage for the Chinese communist revolutionary war and which set Mao's approach apart from Joseph Stalin's Soviet Russian Communism.⁹

Russian. The Russian way of war tends to emphasize the offensive that employs a strategy aimed at inflicting heavy destruction on an enemy, fights "deep battles" with massed forces, and is otherwise attritional in nature, willing to trade space for time on the assumption that time is on its side. Consonant with this approach is deep operations theory thought out by Wladimir Kiriakowitsch Triandafillov and Mikhail Nikolayevich Tukhachevsky and finally carried forward by Georgii Samoilovich Isserson. Equally important still for today is Alexander Andreyevich Svechin's contribution of the "operational art" as the bridge between tactics and strategy.¹⁰

Western. The modern foundations of the Western way of war rest on the writings of the Prussian philosopher Clausewitz, most notably, his masterpiece *On War*, as well as those of the Suisse theorist Baron de Jomini, such as the *The Art of War*, both of which were elevated by Field Marshal Helmuth von Moltke during the 1870–71 German Unification Wars, manifested in the famous Schlieffen plan, and later transformed into the blitzkrieg idea by the Field Marshals Erich von Manstein, Heinz Guderian, and Erwin Rommel.¹¹ The



Students of the 10th Joint Lehrgang General- und Admiralstabsdienst receive instructions on the German army decision-making process 10 September 2014 during a tactical exercise without troops in Uslar, Germany. (Photo by author)

Western way of war is offensive in nature, based on tempo, firepower, and initiative that aims for decisive defeat and annihilation of an adversary through independent operational-level movement and maneuver.

The diversely different ways of war provoke some interesting observations. The Russian example reveals that the term operation and the operational level of war, today almost inflationarily used, are not American or Prussian inventions, but that they stem from the above mentioned Russian theorists. Those theorists also developed the concept of "deep battle," which somehow seems to have inspired U.S. doctrine writers developing the recently published ADRP 3-0, *Operations*, and FM 3-0, *Operations*.¹²

Leaders that understand the background and the connection between the different ways of war can better understand how Russia's annexation of Crimea fits into the Russian way of war or how the Chinese expansion into the South China Sea fits into the Chinese way of war. Furthermore, with an understanding of the theory of war, leaders will also be capable of proactively contributing to campaign plans across all levels of war. Conversely, if military leaders graduate from either college without a clear concept of a theory of war as well as their own understanding of the different ways of war, they might

misinterpret enemy or adversary intentions as well as draw ill-informed conclusions in future assignments.

At this point, the AoW Scholar Program can serve, at least partially, as a blueprint of how to prepare future leaders to think at the operational and strategic level. The purpose of the program is to produce officers with critical thinking skills and an advanced understanding of the art of warfighting. To do that, AoW scholars embark on a challenging journey along national ways of war, total war, Cold War, counterinsurgency theory and experience, limited war, U.S. Army doctrine and concepts, art of command, and current experience. This 360-degree view, incorporating past lessons, considering current solutions, and anticipating future challenges, provides the AoW scholars with a solid kit bag for the uncertainty, ambiguity, complexity, and adversity of the future battlefield; the expanded purpose, so to say, is not just to train for certainty but to educate for uncertainty.

Conclusion

Thinking, developing, and implementing changes in the PME of future field grade officers is hard. This is

while the FüAkBw can learn from the CGSC the value of leadership and historical education. And, finally, both institutions can benefit from an education focused on the art of war as the heart and the soul of the military profession.

For the CGSC, a refinement of the conduct of exercises would greatly enhance the associated learning objectives. Setting up exercises “from easy to difficult” in a holistic fashion would not only enable the use of the full subject-matter expertise of the faculty, but possibly also of external institutions such as divisional, corps, or combatant command headquarters. The climax of that development, at least for a chosen exercise, could be the introduction of senior mentorship.

Also, importantly, in contrast to the time allocated to testing and assignments, the immediate value of contact hours invested into exercises cannot be directly measured. Obviously, some of the provided suggestions might immediately arouse the apples-and-oranges argument from the beginning. However, as an example from a foreign military perspective, it is hardly understandable why the U.S. Army should not be able to attract a



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equally true for the CGSC as well as the FüAkBw. Such change processes have to breach emotional minefields and entrenchments that take into consideration both demands and sensitivities of the constituting parts—in the case of the CGSC, the entrenched traditions of the departments; and in the case of the FüAkBw, the services.

In addition, turning to the super tanker metaphor once again by adapting PME to the continuously evolving OE might—like the legendary Sisyphus—regularly end up one step short of the objective. Against this backdrop, doubtlessly, both colleges can learn from each other how to educate future field grade officers to cope with the challenges of the OE, to plan and execute military operations in that OE, and to function as military advisors to political decision makers. As argued above, the CGSC can learn from the FüAkBw how to refine the conduct of exercises,

sufficient amount of subject-matter experts, including retired generals, to actively contribute to the PME of the precious good of future field grade officers.

For the FüAkBw, rediscovering the currently underestimated significance of historical education would be an important first step. This rediscovery has to go hand in hand with a widening of the historical lens beyond the Prussian and the German histories as well as the history of the German Bundeswehr. Battle and campaign history needs to become an integral part of the curriculum, which currently is not the case. This must include refocusing on Clausewitz and Jomini as German-speaking philosophers of war to enable an understanding of the theory of war. On this historical basis, leadership education can successfully account more appropriately for the theories and aspects of organizational level leadership and change.

Finally, both the CGSC and the FüAkBw would be well advised to center all educational efforts on the art of war. At the heart of this discussion is the question, what is the ultimate purpose of armed forces? The answer to that question defines how to man, train, and equip armed forces, and, as a consequence, how to educate its future leaders. If the purpose of armed forces is to execute military force, then the CGSC and the FüAkBw have to enable future field grade officers not just to fight but to wage war. Waging war at the strategic and operational level is significantly different from fighting war at the tactical. Exploring the art of war—and operational art—will help the CGSC and the FüAkBw to better

prepare officers for waging war in the face of unprecedented complexity, ambiguity, adversity, lethality, and uncertainty.

Ultimately, this leads to another aspect, which has not been touched by this article, the question of how the CGSC and the FüAkBw actually assess the effect of the respective courses on the development and acquisition of the skills and competencies associated with the purpose as outlined at the very beginning. Such a systematic assessment—reaching far beyond regular evaluation reports—still seems to be a weak spot within PME on both sides of the Atlantic and leaves further room for continuous improvement. ■

Notes

Epigraph. Georg Friedrich Wilhelm Hegel, *The Philosophy of History* (New York: P. F. Collier and Son, 1901), 49.

1. For details on how Field Manual (FM) 3-0 depicts the current operational environment, see the introduction to FM 3-0, *Operations* (Washington, DC: U.S. Government Publishing Office [GPO], 6 October 2017).

2. For details on America's competition in the gray zone, see James M. Dubik and Nic Vincent, *America's Global Competitions: The Gray Zone in Context* (Washington, DC: Institute for the Study of War, February 2018).

3. Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), 75–123, 141.

4. James M. Dubik (PhD; Lt. Gen., U.S. Army, ret.; Senior Fellow at the Institute for the Study of War, Washington, DC; professor at the Security Studies Program, Georgetown University, Washington, DC), "COIN and Insurgency," Art of War seminar session no. 43, 30 March 2018.

5. James M. Dubik, *Operational Art in Counterinsurgency: A View from the Inside* (Washington, DC: Institute for the Study of War, May 2012), 11–12.

6. Army Doctrine Reference Publication 3-0, *Operations* (Washington, DC: U.S. GPO, October 2017), chap. 2.

7. For the attritional way of war, see John Grenier, *The First Way of War: American War Making on the Frontier, 1607–1814* (Cambridge, UK: Cambridge University Press, 2005); for the annihilation-focused way of war, see Russel F. Weigley, *The American Way of War: A History of United States Military Strategy and Policy* (New York: Macmillan, 1973); for the role the "politics of the moment" played for the American way of war, see Antulio J. Echevarria, *Reconsidering the American Way of War: U.S. Military Practice From the Revolution to Afghanistan* (Washington, DC: Georgetown University Press, 2014).

8. Sun Tzu, *The Art of War*, with introduction by B. H. Liddell Hart, trans. Samuel B. Griffith (Oxford: Oxford University Press, 1971).

9. Marine Corps Combat Development Command, Fleet Marine Force Reference Publication 12-18, *Mao Tse-tung on Guerrilla Warfare*, trans. Samuel B. Griffith (Quantico, VA, 5 April 1989).

10. G. S. Isserson developed the deep battle concept against the backdrop of the stalemate and contiguous fronts at the Western front during the First World War. In short, his concept relies on an attack and a breakthrough echelon to penetrate a broad front and cause its collapse in depth. For details, see G. S. Isserson, *The Evolution of Operational Art*, trans. Bruce W. Menning (Fort Leavenworth, KS: SAMS Theoretical Special Edition, 2005). For background information on the evolution of the deep battle concept, see Richard Simpkin, "From Broad Front to Deep Battle," in *Deep Battle: The Brainchild of Marshal Tukhachevskii* (London: Brassey's Defence Publishers, 1987), 33–52. In addition, Alexander Andreyevich Svechin refers to "operational art" as a third category of military art between strategy and tactics. For details, see Jacob W. Kipp, "General-Major A. A. Svechin and Modern Military Warfare: Military History and Military Theory," in A. A. Svechin, *Strategy* (Minneapolis: East View Publications, 1991), 23–56.

11. Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976). Henri Antoine Jomini, *The Art of War*, trans. G. H. Mendell and W. P. Craighill (Philadelphia: J. B. Lippencott & Co., 1862). For details on the particular evolution of the Prussian way of war, see Robert Citino, *The German Way of War* (Lawrence, KS: University Press of Kansas, 2005).

12. For details on how Field Manual (FM) 3-0 incorporates Isserson's deep battle concept, see FM 3-0, *Operations* (Washington, DC: U.S. GPO, 6 October 2017), 7-7–7-9.