

Course Syllabus

Summer Course

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GENERAL DAVID H. PETRAEUS CENTER FOR EMERGING LEADERS

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General Information

Description: Lessons are daylong, beginning at 9:30 am and ending at 5:30 pm unless otherwise noted; some are divided into two blocks when they address different topics.

Course Materials

Required Materials

Readings and videos are on Microsoft Teams. Required videos are marked.

Books and purchases:

- 1. Carl von Clausewitz, *On War*, eds. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1984)
- 2. Stanley A. McChrystal, My Share of the Task: A Memoir (New York, NY: Portfolio/Penguin, 2014)
- 3. Peter Paret, Makers of Modern Strategy: from Machiavelli to the Nuclear Age (Oxford: Clarendon Press, 2010)
- 4. Mick Ryan, War Transformed: The Future of Twenty-First-Century Great Power Competition and Conflict (Annapolis, MD: Naval Institute Press, 2022)

- 5. Gordon R. Sullivan & Michael V. Harper, *Hope is Not a Method: What Business Leaders Can Learn from America's Army* (New York, NY: Currency, 1997)
- 6. John A. Warden III, The Air Campaign, Revised Edition (iUniverse: 1998)
- 7. John R. Allen, Frederick Ben Hodges, and Julian Lindley-French, *Future War and the Defence of Europe* (Oxford, England: Oxford University Press, 2021)

Lesson 1	July 29th
TOPIC	LANGUAGE & LOGIC OF WAR
PURPOSE	Gain foundational knowledge vital for the remainder of the course, including the levels of war framework
OBJECTIVES	How are militaries organized? What frameworks help us study war? How do you read a military map? 1. Learn the levels of war 2. Learn how military forces are organized and echeloned 3. Learn the basic vocabulary needed to discuss war and military operations 4. Understand how to read military maps and symbols
KEY TERMS	Levels of war; Grand strategic level, Strategic level, Operational level, Tactical level Campaign; Battle; Doctrine; Services; Branches (and the branches themselves); Joint Combined; Combined arms; Firepower; Maneuver; Movement; Unit; Formation Fireteams; Squad; Light infantry squad; Crew served weapons; Individual weapons Direct fire, Indirect fire; Rate of fire; Commissioned officer; Non-commissioned officer; Table of organization and equipment (TO&E); Task organization; Combat power; Staff; Span of control; Command and control; Chain of command; Defeat; Destroy
MULTIMEDIA (REQUIRED)	 Maps: Austerlitz (1805) Campaign Section https://westpoint.edu/academics/academic-departments/history/napoleonic-wars Videos: Reading a Topographical Map SMCT: Identify Topographic Symbols on a Military Map https://www.youtube.com/watch?v=Ij0 6gfBF5w SMCT: Identify Terrain Features on a Military Map https://www.youtube.com/watch?v=YZJaV1MARhc Videos: Military Symbols Squad Movement Formation & Techniques https://www.youtube.com/watch?v=OKRues4Fwrk The Rifle Platoon Dismounted Movement Techniques Vintage US Army Film https://www.youtube.com/watch?v=-qdFd9Uh0N0 TANK TACTICS: Fast Armored Tactics https://www.youtube.com/watch?v=chMDasloyUU (Begin at 5:25)
READINGS	 Reading Packet (Kagan Readings) Kateryna Stepanenko, "The Kremlin's Pyrrhic Victory in Bakhmut: A Retrospective on the Battle for Bakhmut," <i>Institute for the Study of War</i>, May 2023 US Department of Defense, Chapter 1, "Theory and Foundations," <i>Doctrine for the Armed Forces of the United States</i>, Joint Publication 1 https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp1_ch1.pdf US Department of the Army, <i>Operational Terms and Graphics</i>, Army Field Manual 1-02 https://armypubs.army.mil/epubs/DR pubs/DR a/pdf/web/ARN19780 FM%201-

02x1%20-%20FINAL%20WEB.pdf Tactical Terms (in the first chapter, 1-1, beginning on p. 13 of the pdf) Chapter 3 the military symbols basics, 3-1 to 3-10 are important o Chapter 4 gives main icons for units (better); focus on section 4-4 (echelon amplifiers) through 4-6 (attached amplifiers) o Chapter 9 gives tactical mission tasks with their symbols, useful for putting up against terms and also many maps that we will look at. **LESSON** 1. Explain the four levels of war and how they are inter-related. Be prepared to use a **PLAN** World War II example of your choosing to illustrate each of the four levels. 2. Explain the term "echelons" as it applies to an army. Be prepared to describe the ranks of those commanding a squad, platoon, company, battalion, brigade, division, corps, and army. Also be prepared to describe the general capabilities of each of these commands. 3. Explain the symbols used on military maps for infantry, armor, artillery, cavalry units and headquarters. Be prepared to describe the symbol for each echelon listed in question. 4. Be prepared to defend your position on the following proposition: There is a direct and fixed correlation between the levels of war and echelons of command.

Lesson 2	July 30th
TOPIC	ONE NAPOLEONIC BATTLE — AUSTERLITZ
PURPOSE	Apply the terms and concepts you learned in Lesson 1 to the study of a particular campaign.
OBJECTIVES	 Understand the Austerlitz Campaign of 1805 Learn how to read military operational history with maps Learn how to evaluate a campaign How did each actor understand the situation at the start of the period covered by the reading? How accurate were their respective pictures? What assumptions did each actor make about what the others would do and his own capabilities? What plans did each actor make to achieve his objectives based on that understanding? Were the plans good? What would that mean? How well did each actor execute his plans? How well did each actor adjust his understanding of the situation both to new information and to changes in the situation itself? Why did Napoleon win? Why did the coalition lose? How did political, diplomatic, and inter-personal considerations affect the conduct of military operations? What lessons should each actor (including Napoleon) have drawn from this campaign? Which actor was best (and which was worst) at each level of war from strategic to tactical? Bring evidence to bear! How did each side try to shape the other's perceptions of the situation and its own intentions? Which was more successful? Why?
KEY TERMS	Offense; Defense; Maneuver; Flank; Envelop; Campaign; Battle; Order of battle; Decisive battle; Defeat in detail
MULTIMEDIA	Video: Napoleon's Masterpiece – Austerlitz 1805 https://www.youtube.com/watch?v=bhQe2cjr5XQ
READINGS	 David G. Chandler, <i>Austerlitz 1805: Battle of Three Emperors</i> (London: Osprey Publishing, Ltd., 1990), pp. 6–20 Frederick W. Kagan, <i>The End of the Old Order: Napoleon and Europe, 1801–1805</i> (Cambridge, MA: Da Capo Press, 2008), Chapters 17–18, 21–23
LESSON PLAN RUSSIA, FRANCE, AUSTRIA	 Using Austerlitz on August 25, 1805, as an example, what are your grand strategic, strategic, operational, and tactical objectives? What are your assumptions and understanding or your opponent and the overall situation about to unfold at Austerlitz? How did your group envisioned the battle unfolding. How did the battle actually unfold for you, and (b) why it unfolded as it did?

3. What were the key points in time when your group thought that situation changed so much you had to adapt your plan? How did you adapted—what did you change or modify and what did you leave unchanged? Did those adaptation work as you thought they would? Why?

Afternoon

- 1. Which side:
 - a. Had the more accurate initial understanding and why.
 - b. Adapted "better" or "faster than the other and why? What allowed them to adapt "better" or "faster," and prevented the other from doing so?
- 2. An understanding of how adaptation applies to each level of war.

Lesson 3	July 31st
TOPIC	BATTLE OF GETTYSBURG
GUEST FACULTY	GEN (Ret.) John Allen
PURPOSE	War in reality vs. war on paper: visualize a battlefield, a campaign, and a war
OBJECTIVES	 Apply Lesson 1 and 2 framework to the Gettysburg campaign; focus on visualizing battles on terrain 1. Understand how to "see" terrain using military cartography 2. Understand how terrain affects combat in particular technological and doctrinal circumstances 3. Understand how the operational level of war interacts with tactical decision-making before and during combat 4. Understand how strategic considerations shape tactical decision-making 5. Understand the moral and ethical consequences of military decision-making 6. Understand how some military theorists and practitioners interpreted
KEY TERMS	and implemented Napoleonic warfare Meeting engagement; Military crest; Enfilading fire
MULTIMEDIA	Required:
	Gettysburg, directed by Ronald F. Maxwell (1993; Burbank, CA; Warner Bros
	 Watch Ahead of Class – Understanding Gettysburg Civil War Infantry Tactics https://www.youtube.com/watch?v=tYg3v9lUuNA Civil War Artillery https://www.youtube.com/watch?v=85s-yMUAFqM Civil War Analysis of Terrain https://www.youtube.com/watch?v=RktUeoA3F7w Civil War Logistics https://www.youtube.com/watch?v=ISDQGsdtvX4 Civil War Medicine https://www.youtube.com/watch?v=IDYWP2fz4-E

READINGS

- Stephen Sears, Chapters 1–2, *Gettysburg* (New York: Mariner Books Reprint, 2004)
- James McPherson, Chapter 21, *Battle Cry of Freedom* (Oxford: University of Oxford Press, 1988)
- Excerpts from Mark Grimsley and Brooks Simpson, *Gettysburg, A Battlefield Guide* (Lincoln, NE: Bison Books, 1999)

Optional:

• Jay Luvas, "Lee and the Operational Art: The Right Place, The Right Time," *Parameters*, Autumn 1992.

STUDY GUIDE & LESSON PLAN

1. **Understand who did what to whom**. Know the key players on each side. Make a "cheat sheet" for yourself: Who were the corps commanders under Lee and under Meade? Who were the division commanders under each corps commander? Who were the regimental commanders under each division commander? Who were the cavalry commanders working for Lee and Meade?

2. Understand the context.

- a. Read chapters 1-2, Stephen Sears, Gettysburg.
- b. As you read use at least two maps from the West Point link provided on the syllabus to follow along. Situation 1 June 1863 and Gettysburg and Vicinity, 1 July 1863.
- c. Watch the 5 short videos labeled "understanding Gettysburg" from the syllabus.
- 3. **Understand the terrain**. Take a virtual tour of the battlefield. https://www.nps.gov/gett/learn/photosmultimedia/virtualtour.htm. Read the summaries of each day before you take the virtual tour.
- 4. **Know how the battle unfolded**. Watch the Gettysburg movie clips. Keep your order of battle (Section III of the PDF handout) and your West Point maps (https://www.westpoint.edu/academics/academics-departments/history/american-civil-war) available to keep you oriented.

5. At each stop.

- a. <u>Orient</u> the group to the cardinal directions and to where the Confederate and Union Forces are.
- b. Identify the commander and units of both sides.

c. Present the facts:

- (1) what did each commander intend to do (what was their concept of operations, how did they "see" their forces maneuver and fight, who did they think things would end up)
- (2) how did what they intended fit, or not fit, into that commander's senior's intent
- (3) what actually happened
- (4) why the difference between what was intended and what unfolded, if any.

6. Along the tour, be prepared to discuss the questions below.

- a. <u>Context</u>. Why did Lee go on the offensive? What did you hope to achieve? What was the CSA's political objective at this point of the war? From which direction did Lee come? Upon what roads did he march his corps? How did he use his cavalry? What was the Union's political objective? Given that, what military objective should Meade have deduced from that objective? From which direction did Meade's army come? Upon what roads did he march his corps? How did he use his cavalry?
- b. <u>Day One</u>. How did the battle begin, by whom of the CSA, by whom of the Union? What were the key decisions made on each side, and by whom? What were the consequences of those decisions? How did the day one battle unfold across the terrain? Why did the CSA and the Union do what they did—why were the day one battles fought where they were fought? Why didn't the CSA attack Culps Hill in the late afternoon of day one? Should they have? Was this a missed opportunity? Who had the initiative on day one? Might there have been a difference between tactical and operational initiative? Who "won" day one? Why did you make that conclusion?
- c. <u>Day Two</u>. How were the two armies disposed on the battlefield? What was Lee's plan for day two? Who was to execute that plan? How was the plan supposed to be coordinated? What actually happened? Was Longstreet derelict in his command duties? What did the Union army expect to happen, and how where they prepared for what they expected? How did they have to adapt to what the CSA actually did? Who gave what orders to

whom to make these adaptation? Who had the initiative at the end of day two? Again, can you distinguish between tactical and operational initiative? Who "won" day two? Why did you make that conclusion?

- d. <u>Day Three</u>. How were the two armies disposed on the battlefield? What was Lee's plan for day two? Who was to execute that plan? How was the plan supposed to be coordinated? What actually happened? What alternatives did Lee have? Why didn't take them? What did the Union army expect to happen, and how where they prepared for what they expected? How did they have to adapt to what the CSA actually did? Who gave what orders to whom to make these adaptation? Who had the initiative at the end of day three? Again, can you distinguish between tactical and operational initiative? Who "won" day three? Why did you make that conclusion?
- e. <u>Context</u>. Did either the CSA's or the Union's strategic objectives met or partially met at the end of day three? Did either attain the military objectives they had at the start of the battle? Should Meade have pursued Lee? How do you judge the success or failure of a battle or campaign?

Lesson 4	August 1st
TOPIC	CLAUSEWITZ (FRICTION, CONTRASTING SUPERFICIAL WITH SUBSTANTIVE UNDERSTANDINGS OF WAR); CHAOS & WAR
PURPOSE	Learn an additional language to describe military operations and theory, and evaluate the utility of that language in understanding traditional military theory.
OBJECTIVES	 What is war? What should a theory of war achieve? Can it forecast an outcome? 1. Read Clausewitz, Books I and VIII and discuss the questions above 2. Learn the basic concepts of nonlinearity, complexity, and chaos theory in the scientific/mathematical context from which they arose 3. Evaluate the validity of applying those concepts to the understanding of On War
KEY TERMS	War, Politics, Extremes, Critical analysis // Nonlinearity, Chaos, Sensitive dependence on initial conditions, Random, Additive
READINGS	 BLOCK I: Chaos Theory, Clausewitz, & Moltke Azar Gat, Chapter 6, "The Reaction against the Enlightenment," A History of Military Thought from the Enlightenment to the Cold War, pp. 141–57 This section situates Clausewitz in the context of the Counter-Enlightenment or German Movement and introduces some of the philosophical trends and ideas we talk about in class. Clausewitz, On War (Book I, Chapters 1–8, Book II, Chapters 5–6), pp. 75–123 and 156–74 This is the core Clausewitz theory and the portion of the book that best represents his finished thought. Read it extremely closely. Look at the various analogies and metaphors he uses.
	 Alan Beyerchen, "Clausewitz, Nonlinearity and the Unpredictability of War," in Thomas J. Czerwinski, Coping with the Bounds: A Neo-

Clausewitzian Primer

- O This is another, more detailed and broader, exposition of chaos theory, now with explicit reference to war, military theory, and, especially, Clausewitz. It specifically addresses On War, Book I, Chapter 1, which is assigned for the next block of this lesson. You may want to read that first, or at least have it handy when reading the Beyerchen.
- Edward Lorenz, Chapters 1 and 4, *The Essence of Chaos* (Seattle, WA: Univ. of Washington Press, 2008) (Focus on the section that starts with "Searching" subhead and read until the end of the chapter).
 - Lorenz was a meteorologist who made some of the most important intellectual breakthroughs in the formation of chaos theory as a mathematical discipline. This reading has nothing to do with war in principle, but, rather, describes what was at the time a new way of looking at aspects of the world that had been supposed previously to be rule-bound and predictable.

- 1. How does Clausewitz define, describe, and use the following concepts:
 - a. *War as a duel and pair of wrestlers*. What is Clausewitz trying to tell us using these analogies?
 - b. *Genius*. What is Clausewitz's concept of genius, and what does this concept tell us about Clausewitz's understanding of war?
 - c. *Friction and fog of war*. What are the sources of friction and fog? To what extent can friction and fog be eliminated or reduced, if at all?
 - d. *War by algebra*. What does Clausewitz mean by "war by algebra," and what is the central point he is trying to make about war?
- 2. The role of "theory," "critical analysis," and "historical examples."
 - a. *Theory*: What is it, and why is it useful?
 - b. *Critical analysis*: Its definition and role?
 - c. *Historical examples*: What is the proper use of historical examples?
 - d. The definition and role of "extremes" in understanding war.
 - e. What does the discussion of theory, critical analysis, historical examples, and polarity/extremes tell us about how Clausewitz understands war?
- 3. Clausewitz's understanding of war.
 - a. *The trinity:* "More than" a chameleon. What is Clausewitz's central idea in his discussion of the trinity and his use of the chameleon analogy? What does this central idea say about war?
 - b. What is war and what is war not, in Clausewitz's mind?
- 4. Purpose and means.
 - a. What is (are) the purpose(s) of war and how is (are) purpose(s) related to means? Can there be multiple forms of combat? How? Why?

Lesson 5	August 2nd
TOPIC	POLITICS & WAR: CLAUSEWITZ VS. MOLTKE
PURPOSE	Reflect upon the correct relationship between military operations and high politics (or policy) in order to decide whether you believe that Clausewitz or Moltke had it right.
OBJECTIVES	 How much can and should a political leader intervene in military operations? Understand Clausewitz's views on the relationship between politics (policy) and military operations at every level. Are his views coherent or contradictory? Evaluate Moltke's portrayal of Clausewitz's views (consider both the Moltke reading and the footnote in On War noted below). Did Moltke get it right? Why was this dispute of such moment to Moltke? (Look to the Craig reading for this.) Was Moltke wrong, or had Clausewitz simply failed to foresee the kind of challenge Moltke faced? What does it mean to have a "system of war" or "war as a system?" Explore the utility of reading the work of Helmuth von Moltke the Elder through the prism of nonlinearity, complexity, and chaos theory.
KEY TERMS	War as a system
READINGS	Block I: Clausewitz on Politics and War
	• Clausewitz, On War, pp. 61–71
	 Notes by Clausewitz and his wife regarding the nature of the composition and the manner of its publication. This is extremely important front-matter. You need to understand how On War took the final form that it did and what aspects of it best reflected Clausewitz's most advanced thinking. Re-read Clausewitz, On War, pp. 75–99 (Book I, Chs. 1 and 2) Seriously, re-read them. There is no amount of re-reading of On War that will cease to be of interest. Clausewitz, On War, pp. 605–10 (Book VIII, Ch. 6, Part B) and especially see the note on p. 608 This is short and vital—especially the footnote. We say again: READ THE FOOTNOTE!
	Block II: Moltke and Clausewitz
	Clausewitz, Carl von Clausewitz: Two Letters on Strategy, pp. 1–21 (a portion of Clausewitz's letter to Roeder, December 22, 1827)

this lesson. Your understanding of the Clausewitzian understanding of the relationship between war and politics (and therefore of that question itself) is apt to be partial if you do not read this letter.

- Gordon A. Craig, *The Politics of the Prussian Army, 1640–1945*, pp. 180–216
 - o An important brief overview of the history in question
- Hajo Holborn, "The Prusso-German School: Moltke and the Rise of the General Staff," in *Makers of Modern Strategy*, pp. 281–95
 - This is a brief and brilliant essay on a phenomenally complex personality. The interplay between Moltke and Clausewitz requires careful examination. Reflect on the ways in which Moltke is a true Clausewitzian—and the ways in which he clearly is not. The following short excerpt from Moltke's writings may help clarify.
- Helmuth von Moltke, "War and Politics," in *Moltke on the Art of War: Selected Writings*, ed. Daniel J. Hughes, pp. 35–36
- von Moltke, "On Strategy, 1871," in *Moltke on the Art of War*, pp. 44–47
- Gunther Rothenberg, "Moltke, Schlieffen, and the Doctrine of Strategic Envelopment," in *Makers of Modern Strategy*, pp. 296–310 (we will revisit the remainder of the article in the next lesson)

LESSON PLAN

Incorporate Books I, II, and VIII as well as the notes and letters into your answers.

- 1. War and its purpose.
 - a. Once set, is a war's aim fixed? If so, why? If not, why not?
 - b. What is the relationship between a war's aim and the means used to achieve that aim?
 - c. What is the relationship between policy and military action at each level of war?
- 2. Between the political and the military.
 - a. How are the roles of the political and military leaders differentiated, if at all?
- 3. Theory and practice.
 - a. Does Clausewitz suggest that from the start one must conceive of war as a whole or just conceive of the first steps then adapt? Why does he take the position that he does?
 - b. What does "defeat" mean? The doctrinal definition and how Clausewitz discusses it.
 - c. What is the relationship between absolute and real war? Why does this relationship matter?

d. In the end, is Clausewitz's theory of war coherent and consistent –either, both?	
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Lesson 6	August 3rd
TOPIC	RAILROADS & RIFLES
GUEST FACULTY	Maj. Gen. (R) Mick Ryan
PURPOSE	Understand how changes in technology generated (required) transformations in military organization, doctrine, and theory.
OBJECTIVES	How does a revolutionary new technology change the conduct of war? And how does any large organization adopt a revolutionary new technology?
KEY TERMS	
MULTIMEDIA	 Video: Understanding Railroads The Railroad Journey and the Industrial Revolution: Crash Course World History 214 https://youtu.be/GYAk5jCTQ3s
READINGS	 Dennis Showalter, Railroads and Rifles, Part One (Railroads), pp. 19–72 This is a long, intricate history of a period you are not likely familiar with at all. But you have already read about Moltke—who he was, where he came from, and what he did—and you have read some of his own writing. You have also read a lot about the Napoleonic Wars and, particularly, the different lessons contemporaries drew from them. This reading should help you reflect on the challenges and opportunities offered to military theorists and practitioners by changing technology. How can one tell if a new technology might revolutionize warfare? How can one guess about how to use that technology to do so? How do military requirements interact with economic needs to shape the evolution of both military and civilian technology? What role do individuals play in generating disjunctive change? Review the two Makers of Modern Strategy chapters on Moltke the Elder from previous lessons. Gen. Gordon R. Sullivan and Col. James M. Dubik, Envisioning Future Warfare, 1995 https://www.armyupress.army.mil/Portals/7/combat-studies-institute/csi-books/sullivan.pdf James M. Dubik, The Army's "Twofer": The Dual Role of the Interim Force, October 2001 https://www.ausa.org/sites/default/files/LWP-39-The-Armys-Twofer-The-Dual-Role-of-the-Interim-Force.pdf Gen. (Ret.) Gordon Sullivan and Col. (Ret.) Michael Harper, Hope is Not a Method, pp. 9–21, 39–42, 49–54, 77–82, 147–49, 155–71, 182–87, and 236–41 [ebook sections-9-21: Ch 1 from "Front End Work" to end of chapter; 39-42: Ch 3 "When in Charge, Be in Charge"; 49-54:

"Leadership Action Cycle" thu "Somali Road"; 77-82: Ch 5 "The Power of Vision" thru "Thinking and Doing"; 147-49: Ch 9 "Better is Better"; 155-71: "Dual Nature of Change" thru Ch 10 "Demonstrating the Future"; 182-87: Ch 10 "Overcoming Resistance to Change" thru "Buy In and Critical Mass"; 236-41: Ch 13 "Rules (with a Small "R") for Guiding Change"]

LESSON PLAN & STUDY GUIDE

Part 1.

- 1. Understand the chronology of railroad development.
 - a. Read the Showalter piece. Come to class having developed own chronology. As you read, list the date of every event marking the progress of the railroads or an obstacle to that progress. List also the key person(s) associated with that event and what they did to advance or obstruct the development of the railroad as well as why they did so.
- 2. Come to class also being able to describe the different kinds of actions that moved railroads from a concept to a reality—i.e. the difference between having an idea, selling that idea, proving the idea, adopting the idea, institutionalizing the idea, and adapting the idea.
 - a. Watch "The Railroad Journey and the Industrial Revolution." Try to figure out what "Machines make their own laws" might mean. Try also to figure out what understanding railroads "as a system" might mean.
 - b. Go back through your chronology. Identify point at which "having" the idea of a rail system began and ended. Do the same with "selling, proving, adopting, institutionalizing, and adapting." Identify also the overlap between these activities as well as which activities were sequential and which were simultaneous?
 - c. Look at **the people associated with each of these activities**. List their strengths and weaknesses. What characteristics allowed them to succeed or fail?
- 3. **Be prepared to brief** your chronology **and** the categories within at the start of class.
- 4. What exactly does "institutionalization" mean in the military context? What are the conditions that allow one to say with confidence that a military has developed a new capability?
- 5. Explain, using the railroad example the difference between the rate of

technological advance and the rate of human and organizational adaptation. Think about this difference and be prepared to explain it in your own words...using the railroad example.

Part 2. To be discussed during this lesson or (more likely based on VVIP visit) on August 3 (US conventional warfare from 1970s-Today).

- 6. Apply the ideas contained in the discussion of railroads to the Army's adoption of digital technologies in the 1990s.
 - a. Describe, in your own words, the path that Chief of Staff of the US Army, Gen. Gordon Sullivan wanted to put the army on. Why did he think that path was necessary? What was "forcing" the army to change?
 - b. How would Gen. Sullivan answer question about institutionalization: What exactly does "institutionalization" mean in the military context? What are the conditions that allow one to say with confidence that a military has developed a new capability?
 - c. List, and be prepared to discuss, the similarities and differences between the railroad example and the digitization example with respect to having an idea, selling that idea, proving the idea, adopting the idea, institutionalizing the idea, and adapting the idea.
 - d. Think forward: what recent technological innovations as well as those on the horizon may affect military operations? What insights from the railroad and digitalization examples might be helpful in adapting to these innovations?

	August 4th
PURPOSE	Reading Day

Lesson 7	August 5th
TOPIC	SCHLIEFFEN TO STALEMATE
PURPOSE	 Decide which of the following are true: a. Trench warfare stalemate resulted from the stupidity of generals. b. Stalemate was the inevitable result of the military technology of the time. c. The German attack in 1914 failed because of Moltke's changes to Schlieffen's plan. d. The 1914 attack failed because Schlieffen designed it mechanistically and in disregard of Moltke's dictum that no plan survives first contact with the enemy. e. The attack failed because Schlieffen sought Napoleonic-style decisive victories in an era in which they were no longer possible. Why did the war stalemate on the Western Front? How did the various actors try to overcome the stalemate?
OBJECTIVES	Planning vs. execution; is war an engineering problem? O World War I represented a failure at the tactical level—or at the operational level?—or at the strategic level?
KEY TERMS	Motorized, Mechanized, Mobility; Trench warfare (suite of terms); Infiltration tactics; Michael Offensive
MULTIMEDIA	 Videos: Trench Warfare https://youtu.be/NtfOpb1SG34 German Tactics for 1918 Spring Offensive The Great War Special https://www.youtube.com/watch?v=wMfQXPya9zs Tank Development in World War 1 The Great War Special https://www.youtube.com/watch?v=zjj13U-j0_g
READINGS	 BLOCK I: Schlieffen and the First Campaign of World War I Terence Zuber, "1920: Kuhl Reveals the Schlieffen Plan," German War Planning, 1891–1914, pp. 265–71 Gunther Rothenberg, "Moltke, Schlieffen, and the Doctrine of Strategic Envelopment," in Makers of Modern Strategy, pp. 310–325 (pp. 296-310 in previous lesson). Another brilliant essay from one of the best compilations of writings about war ever produced. Pay careful attention—there are TWO Helmuth von Moltkes. You have been reading about

mobilization and the general staff system to the Prussian Army and led that army through the Wars of German Unification. Now you'll meet his nephew, Helmuth von Moltke the Younger, who will occupy his uncle's position as Germany approaches and enters World War I. Use this essay to reflect on all of the theoretical and practical debates swirling between Clausewitz, Moltke the Elder, Jomini, and Schlieffen about the nature of war as art, science, or a hybrid.

- James L. Stokesbury, A Short History of World War I, pp. 22–56 (through the First Marne). Recommended as overview; not required—but make sure you understand what happened in 1914 through the First Battle of the Marne
- Zuber, "The 'Schlieffen' Plan," German War Planning, 1891–1914: Sources and Interpretations, pp. 187–204 (Read closely and with a map)
 - O This is the closest we can get to the "Schlieffen Plan," which was destroyed along with most of the documents relating to Germany's pre-war planning in a vain attempt to absolve Germany of responsibility for the war. This is NOT the actual plan, however. It is a concept of operations, and a preliminary one. Understand how it was supposed to work. Try to identify logical gaps and potential problems within this document. Then reflect on how much Moltke the Younger was to blame for the "failure" of the "Schlieffen Plan." Finally, think about what this debate says about the nature of war.
- Timothy Lupfer, The Dynamics of Doctrine: The Changes in German Tactical Doctrine During the First World War, Combat Studies Institute, Fort Leavenworth, Kansas, 1981 (58 pages)
 https://www.armyupress.army.mil/Portals/7/combat-studies-institute/csi-books/leavenworth-papers-4-the-dynamics-of-doctrine.pdf
 - This is the only reading this lesson that describes the nature and challenges of trench warfare— understanding that is more important than mastering the details of infiltration tactics.

Lesson 8	August 6th
TOPIC	ARMORED WARFARE & OPERATIONAL ART
PURPOSE	Understand the evolution of operational art as a distinct branch of military theory and practice.
OBJECTIVES	Learning from success and failure: How did the combatants of WWI try to envision the next war and adapt their forces to fight it?
KEY TERMS	Blitzkrieg, Operational Art, Front, Deep battle
MULTIMEDIA	 Videos: What was the Blitzkrieg? The Blitzkrieg Explained as Short as Possible
READINGS	 "Coping with Trench-Warfare Stalemate" This block is pivotal for understanding the evolution of armored warfare, so do not skip it. Make sure that you read the Lupfer without fail. If we do not get to it today, then skim to refresh your memory on it during the reading day tomorrow so that you have it in your mind after reading day. David Glantz, Chapters 2, 4, and 5, "The Nature of Operational Art," "The Formative Years of Soviet Operational Art," and "The Great Patriotic War and the Maturation of Operational Art," Soviet Military Operational Art: In Pursuit of Deep Battle, (New York: Frank Cass, 1991) Make sure you get to this reading. The Germans took armored warfare and operational art one way—the Soviets took it somewhere rather different. Make sure you can sense the differences. J. F. C. Fuller, "The Application of Recent Developments in Mechanics and Other Scientific Knowledge to Preparation and Training for Future War on Land," Gold Medal (Military) Prize Essay in the Journal of the Royal United Services Institute, 1919 https://rusi.org/publication/rusi-journal/war-land-application-recent-developments-mechanics-and-other-scientific J. F. C. Fuller, "Plan 1919" Michael Geyer, Chapter 19, "German Strategy in the Age of Machine Warfare, 1914–1945," in Makers of Modern Strategy Robert M. Citino, Quest for Decisive Victory: From Stalemate to Blitzkrieg

in Europe, 1899–1940
 Second half of Chapter 6, the Interwar Years, pp. 193–213 (from
"Germany: Doctrine and Developments") as well as Chapter 8,
('Operational Art Reborn"), pp. 251-83

Lesson 9	August 7th
TOPIC	AIRPOWER—DOUHET TO WARDEN FROM THE ORIGINS OF AIR POWER THEORY TO ITS MODERN STATE
GUEST CO- INSTRUCTORS	GEN (Ret.) Curtis Scaparrotti
GUEST FACULTY	GEN (Ret.) Stanley McChrystal
PURPOSE	Understand the terms and concepts of air power theory as it evolved from early in the 20th century to the present.
KEY TERMS	 Understand the rationale for seeing airpower as fundamentally revolutionary in the first half of the 20th Century. Evaluate the nature of the debate over the right relationship between airpower and other forms of military power in that time. Master the concept of "center of gravity" as it is used in the context of airpower theory. Compare and contrast the airpower view of the enemy (and how to operate against him) with the view presented by operational art theory. Consider both operational art and airpower theory in the context of nonlinearity, complexity, and chaos theory. Air power; Strategic bombing; Center of gravity; Air superiority; Air
	supremacy; Close air support; Parallel warfare
MULTIMEDIA	 Videos: Victory Through Air Power: Animated History of Aviation (1942) https://youtu.be/tUeKeN9bXSE Airpower in WWI

READINGS

Morning: General McChrystal

- For our speaker: Stanley McChrystal, My Share of the Task, pp. 89–263
 - Students should begin this reading, focusing on the narrative of the creation of the Joint Special Operations Task Force and reflecting on how the principles embodied in that organization reflect the theories and history articulated in other lessons.

Afternoon

- David Deptula, "Defining Rapid Decisive Operations: Parallel Warfare," in *Effects-Based Operations: Changes in the Nature of War*, pp. 3–7
 http://www.ausairpower.net/PDF-A/AEF-AFA-Effect-Based-Operations-D.A.Deptula-2001.pdf
- David MacIsaac, "Voices from the Central Blue: The Air Power Theorists,"
 Makers of Modern Strategy, Chapter 21, pp. 624–47
- John Warden, "The Air Campaign in Retrospect," *The Air Campaign* (entire)
 - This is a long reading, but students should focus on Chs. 1,
 2, 10, "The Air Campaign in Retrospect."
- NOT REQUIRED BUT HIGHLY RECOMMENDED FOR YOUR
 FUTURE EXPLORATION: John F. Boyd's briefings are available at
 https://www.airuniversity.af.edu/Portals/10/AUPress/Books/B_0151_Boyd_Discourse-Winning_Losing.PDF
 - These readings are seminal works shaping the evolution of American airpower theory—and, thus, of the world's airpower theory. The recommended papers are:
 - 41.5 Abstract
 - 42 Pattern
 - 43 The Strategic Game of? and?
 - 45 Winning and Losing

- 1. Airpower and airpower alone? The first theorists, the first adopters, strategic bombing, the later theorists/adopters
- 2. Parallel Warfare
- 3. What would Clausewitz say?

Lesson 10	August 8th
TOPIC	US CONVENTIONAL WARFARE, 1970S-TODAY
GUEST CO- INSTRUCTORS	GEN (Ret.) Curtis Scaparrotti
GUEST FACULTY	LTG (Ret.) H.R. McMaster
PURPOSE	The wars we want to fight: how the US prepared for, won, and learned from the Gulf War
OBJECTIVES	 Understand the American theory and practice of conventional warfare at the end of the 20th century. Examine different approaches to the problem of designing military doctrine based on observation of contemporary wars and the study of adversary intentions and theory. How does AirLand Battle differ from Soviet Deep Battle? Evaluate competing explanations for the outcome of the first Gulf War and their implications for the future of American war-fighting. Consider the continuities and discontinuities of warfare over many changes in technology throughout the 20th century. Evaluate the nature of the debate over the right relationship between airpower and other forms of military power. Contrast the experience of the Gulf War with the other US military
KEY TERMS	deployments of the 1990s. Active Defense; Air-Land Battle
MULTIMEDIA	 Videos: The 1st Gulf War, Battle of 73 Easting https://www.youtube.com/watch?v=tJNk7DcFIkk Airpower in the 1st Gulf War https://www.youtube.com/watch?v=LNH-kCdtEaw
READINGS	 Douglas W. Skinner, <i>Airland Battle Doctrine</i>, September 1988 https://apps.dtic.mil/dtic/tr/fulltext/u2/a202888.pdf John Warden, Epilogue, <i>The Air Campaign</i> Thomas A. Keaney and Eliot A. Cohen, Summary Report, pp. 1–27, ("What happened?"), and 235–53 ("Was Desert Storm a Revolution in Warfare?"), <i>Gulf War Air Power Survey</i> Stephen Biddle, "Victory Misunderstood: What the Gulf War Tells Us about the Future of Conflict," 1996 H.R. McMaster, "Eagle Troop, Second Squadron, Second Armored Cavalry Regiment," <i>The Bridge</i>, February 26, 2016 H.R. McMaster, "What We Learned: From the Battle of 73 Easting" Stephen D. Biddle, <i>Commentary on "Victory Misunderstood"</i>

- 1. Gulf War and Battle of 73 Easting
- 2. Examine different approaches to the problem of designing military doctrine based on observation of contemporary wars and the study of adversary intentions and theory.
- 3. How does AirLand Battle differ from Soviet Deep Battle?
- 4. Modernization in 1990sGulf War Air Campaign if not covered above.
- 5. The Gulf War and the discussion of ground war vs. airpower triumphalism (Warden, Deptula, and Biddle readings)
- 6. The 1990s unconventional wars with Gen. Scaparrotti

Lesson 11	August 9th
TOPIC	RESPONSES TO US CAPABILITIES—RUSSIA
GUEST CO- INSTRUCTORS	GEN (Ret.) Curtis Scaparrotti
GUEST FACULTY	Mason Clark & Karolina Hird
	GEN (Ret.) David Petraeus
PURPOSE	Understand how state adversaries have attempted to circumvent US conventional superiority
OBJECTIVES	1. How does the Russian military system differ from NATO and Ukraine? What are the strengths and weaknesses of that system?
	2. What are the key causes of the current course of the war in Ukraine?
	3. How effective have Russian forces been in Ukraine and what opportunities do Ukrainian forces have?
MULTIMEDIA	• For GEN (R) David Petraeus's visit, watch 2-3 of the videos <u>found here</u> and read the transcript for the rest of the videos, available on the site or in this channel's files.
READINGS	 Lester W. Grau and Charles K. Bartles, "The Russian Way of War: Force Structures, Tactics, and Modernization of the Russian Ground Forces," Foreign Military Studies Office, August 22, 2017, [selected excerpts focusing on Russian military thinking on orders and planning, as well as the basic structure of the Russian ground forces.] pp. 3-14: the Russian personnel system and General Staff pp. 25-33: basic structure of the Russian military; military district and army structure. Note that this book was written before the Russian military's pivot back to fielding divisions instead of brigades. pp. 51-58: the Russian decision making and planning process; their differences from Western structures pp. 209-214: Russian Motor Rifle troops (including discussion of structure and missions) Timothy L. Thomas, "Russian Military Thought: Concepts and Elements," MITRE Corporation, August 8, 2019, [a detailed and holistic study of Russian military thinking and conceptualization of modern and future war. Selected excerpts focused on future war and the writing of Chief of the General Staff Army General Valery Gerasimov]
	• Michael Kofman and Rob Lee, "Not Built for Purpose: The Russian Military's Ill-Fated Force-Design," <i>War on the Rocks</i> , June 2, 2022 [<i>The best general</i>

- report available on the Russian use of BTGs in the specific context of Ukraine in 2022.]
- Mykhaylo Zabrodskyi, Jack Watling, Oleksandr V. Danylyuk, and Nick Reynolds, "Preliminary Lessons in Conventional Warfighting from Russia's Invasion of Ukraine: February-July 2022," Royal United Services Institute, November 30, 2022 [A fantastic analysis of Russian and Ukrainian performance in the initial months of the 2022 invasion of Ukraine, including discussion of Russia's deviations from established doctrine in initial lessons learned applicable to conventional warfighting writ large.]
- Jack Watling and Nick Reynolds, "Meatgrinder: Russian Tactics in the Second Year of Its Invasion of Ukraine," *Royal United Services Institute*, May 19, 2023 [Another excellent RUSI report, covering Russian tactics and adaptations in early 2023.]
- Russian Offensive Campaign Assessments, *Institute for the Study of War* [selected updates focused on key inflections and components of the war]
 - Frederick W. Kagan, "Key Terrain in the Russian Invasion of Ukraine,"
 October 16, 2023 [the necessity of enabling Ukraine to liberate Russian-occupied territory]
 - o Kateryna Stepanenko, Karolina Hird, Riley Bailey, et. al., "Shoigu's Intended Restructuring of the Russian Military," January 17, 2023
 - o Frederick W. Kagan, Kimberly Kagan, Riley Bailey, et. al., "Impact of Western Aid Delays on Ukraine's Capabilities," January 29, 2023
 - Kateryna Stepanenko and Mason Clark, "Putin's Decision Making,"
 February 5, 2023
 - Karolina Hird, George Barros, and Frederick W. Kagan, "Russian Order of Battle (ORBAT) in Southern Ukraine," April 23, 2023 [ORBAT as of late April]
 - Riley Bailey and Kateryna Stepanenko, "Russian Command Changes,"
 April 30, 2023
 - o Kateryna Stepanenko, "The Kremlin's Pyrrhic Victory in Bakhmut: A Retrospective on the Battle for Bakhmut," May 24, 2023

- Introduction to modern Russian military thinking with a focus on its differences from US/NATO mechanized warfare
- Overview of the war in Ukraine

Lesson 12	August 10th
TOPIC	RESPONSES TO US CAPABILITIES—CHINA
GUEST CO- INSTRUCTORS	GEN (Ret.) Curtis Scaparrotti
GUEST FACULTY	Alexis Turek & Nils Peterson
PURPOSE	Understand how state adversaries have attempted to circumvent US conventional superiority
OBJECTIVES	 What are the central ideas of Chinese military strategy? How does China's way of war compare to that of other countries you have studied? How has China's military strategy changed since the introduction of the 1993 Military Strategic Guidelines? What geopolitical conditions had the greatest impact on this strategic change? What impact do you believe PLA military modernization will have on the future of Chinese warfare?
KEY TERMS	VIO 191920 01 011110000 GELLEVO
READINGS	 Historical Paul Godwin, "Change and Continuity in Chinese Military Doctrine, 1949-1999, Chinese Warfighting: The PLA Experience since 1949," Ch. 2 M. Taylor Fravel, Active Defense: China's Military Strategy Since 1949, Chs. 2 and 5 S.C.M. Paine, "Mao Zedong and Strategies of Nested War," The New Makers of Modern Strategy Supplemental Larry Wortzel, "China's Foreign Conflicts since 1949," A Military History of China Modernization/Modern Way of War M. Taylor Fravel, "The 1993 Strategy: 'Local Wars Under High-Technology Conditions," Active Defense, Ch. 6 Rush Doshi, The Long Game, Chs. 4 and 8 Roderick Lee and Marcus Clay, "Don't Call it a Gray Zone: China's Use-of-Force Spectrum," War on the Rocks Dean Cheng "PLA Perspectives on Network Warfare in Informationized
	Local Wars," US Congressional Testimony Taiwan
	Dan Blumenthal and Frederick W. Kagan, "China's Three Roads to Controlling Taiwan" <i>AEI</i>

Historical

1. What was Mao's strategy for revolution? What effect did the transition from guerilla tactics/mobile warfare to maneuver operations have on PLA campaign operations in the three major campaigns of the Chinese Civil War?

PRC Military Thinking Post-Korean War

- 1. What is Active Defense? How does it differ from previous operational strategies used by the PLA? What impact might Active Defense have on the conduct of future wars?
- 2. What do you see as the biggest changes in PLA strategy since the Chinese Civil War?

Political Warfare

1. What is the Chinese conception of political warfare? What impact has it had on Chinese strategy?

Future

- 1. What are the PLA strategies of informatization and intelligentization? What technological and strategic innovation would be necessary for the PLA to effectively enact either of these strategies in a future conflict?
- 2. What new technologies do you think will have the biggest impact in a future war with China? How do you see China's technological advancement impacting overall PLA force posture?
- 3. China has not fought a war since 1979, and have thus closely studied the wars fought by other countries. What lessons from recent wars do you believe will have an impact on a potential future war over Taiwan?
- 4. What is China's "peacetime use of military force" strategy? What should the US and our allies do in response to this employment of force?

Lesson 13	August 11th
TOPIC	THINKING ABOUT THE FUTURE OF WAR
GUEST CO-	GEN (Ret.) Curtis Scaparrotti
INSTRUCTORS	
GUEST FACULTY	GEN (Ret.) John Allen
PURPOSE	What have we learned?
OBJECTIVES	How can one intelligently speak about the future of war?
	What can the study of military history teach us?
	Key takeaways and conclusions
KEY TERMS	
MULTIMEDIA	Video: ARMY TRADOC G-2, The Future Operating Environment
	https://m.youtube.com/watch?v=0VsikOe
	wg&t=0s&index=11&list=PLx2Zn7hPXT7cnQwhyI5YybdgOJdlorbo1%2
	<u>2</u>
READINGS	The Operational Environment and the Changing Character of
	Warfare, TRADOC Pamphlet 525-92, October 2019
	https://adminpubs.tradoc.army.mil/pamphlets/TP525-92.pdf
	• H.R. McMaster, "On War: Lessons to be Learned," Survival 50:1 (2008)
	https://www.tandfonline.com/doi/full/10.1080/00396330801899439
	H.R. McMaster, Continuity & Change: The Army Operating
	Concept and Clear Thinking About Future of War, March-April 2015
	https://www.armyupress.army.mil/Portals/7/military-
	review/Archives/English/MilitaryReview_20150430_art005.pdf
	• H.R. McMaster, "The Pipe Dream of Easy War," The New York Times,
	July 20, 2013
	• Michael Howard, "The Use and Abuse of Military History," Royal United
	Services Institution Journal 107:625 (1962)
	https://www.tandfonline.com/doi/abs/10.1080/03071846209423478?journ
	alCode=rusi19
	• John Allen, Frederick Ben Hodges, Julian Lindley-French, Future War
	and the Defence of Europe (Oxford, England: Oxford University Press, 2021), "Russia and Europe's northern and eastern flanks," "Scenario 1,"
	"Introduction," "Could NATO (still) defend Europe?", "Hyperwar:
	Europe's digital and nuclear flanks," and "Defending Europe"
	US Department of the Army, Chief of Staff Paper #1, Army Multi-Domain
	Transformation: Ready to Win in Competition and Conflict (March 2021)
	Theresa Hitchens, "The Joint Warfighting Concept Failed, Until It
	Focused on Space and Cyber," <i>Breaking Defense</i> , July 26, 2021
	1 7 7 3 2

- Theresa Hitchens, "Digital Design Revolution Key To All Domain Ops: Air & Space Officials Say," *Breaking Defense*, July 9, 2021
- H.R. McMaster, "How China Sees the World and How We Should See China," *The Atlantic*, May 2020

MORNING:

- How to think about the future of war?
- Revisiting several key discussions from earlier in the course: Clausewitz, Napoleon, Railroad and Rifles, Interwar Modernization, Digitization.

AFTERNOON:

• What did you take away from the course?