

The Changing Face of War

The importance of humans, ethos, and values

by Capts Alexander Irion & Robert Callison

“A simple but key ingredient of what manifests fighting power in a unit is in a soldier’s head and heart rather than the sophistication of the weapon in his hands.”¹

**—Col Jesse H. Denton,
25 May 1983**

War updates, it does not replace.² As war updates, human interaction within the unchangeable nature of war can create an asymmetric advantage with the changing character of war.³ Service investments in the disciplines of data science and artificial intelligence will contribute to the evolution of warfare and shape concepts of operation for any future contested environment.⁴ Growing demands stemming from the *National Security Strategy*, *National Defense Strategy*, and the *38th Commandant’s Planning Guidance* orient the force toward the increased proliferation of more lethal and sophisticated technologies to maintain a competitive advantage over the pacing threat.⁵ Perhaps not as well appreciated in this rush to embrace new technologies, however, is the idea that redefining the battlefield by incorporating new technology within our current organizational structure will *increase* our responsibilities to maintain the discipline and ethics required of the military professional.⁶

Three important human-related components exist within the nature of war regardless of technology: *work-*

ing together, *clear communications*, and *trust*. This article explores three historical examples where human interaction was the decisive factor in determining tactical and operational military success. The first of the three cases is the Battle of Agincourt in 1415, the second includes German and French military developments between the World Wars, and the third focuses on LtGen Victor Krulak’s analysis of the Corps’ struggle for existence in the decades after the end of World War II. Through the lens of these cases, we demonstrate the consistent importance of the human throughout the changing character of warfare and utilize the lessons learned from each case to emphasize the importance of the human in modern warfare.

1,000 Hits Per Second

In warfare, no matter the era, failing to emphasize the importance of human decision making in warfare has proven fatal, especially when introducing new technology or innovation. The 1415

>The authors are both students at the Expeditionary Warfare School.

Battle of Agincourt in the Hundred Years’ War is an early example of how teamwork with advanced man-machine teams can be utilized to generate focus while converging effects on a numerically and technologically superior force.⁷ Charles d’Albret, commander of the French army at Agincourt, failed to recognize and train his troops to mitigate King Henry V’s integration of English longbowmen into his forces. The less exquisite English longbow, in the hands of a cohesive team, massed firepower against a superior force and degraded French combat effectiveness. Technically superior English disruptive operations were effective in infiltrating numerically-superior French lines, ultimately concluding with the defeat of the French knights.⁸

On the morning of 25 October 1415, some 6,000 English longbowmen and dismounted knights established defensive positions against an estimated 25,000 French knights and archers.⁹ French lines were hit with heavy and sustained arrow fire from English longbows. The French knights, renowned for their success on the battlefield and the prowess of their armored cavalry, were unable to adapt their heavy armored units to the persistent volleys of English arrows.¹⁰ Muddy terrain, heavily wooded flanks, and the weight of their French armor restricted their movement. The disruptive effects of the persistent English volleys created confusion in the French lines and degraded their ability to effectively communicate. Tenthousand French are believed to have been killed in action during the intense one-day battle, whereas the estimated English casualties were only 100.¹¹



Battle of Agincourt. (Miniature by *Chroniques d'Enguerrand de Monstrelet*.)

The English longbows used in Agincourt were not a new technology—similar technology of the 1415 longbow dates back to the Middle Ages.¹² Human interaction with the longbow, emphasized by King Henry V's disciplined training of his English longbowmen, integrated skilled man-machine teams within their concepts of operations. This contributed to their advanced rate of fire and allowed them to volley nearly 1,000 arrows per second at the French lines.¹³ Modern attempts to match this same rate of fire using the 1415 longbow technology require extremely skilled archers in peak physical condition. The training of English longbowmen to develop the technical skills required to mass their advanced rates of fire was so intense that exhumed physical remains of English longbowmen from this time period display physical deformities believed to be the result of their intense training.¹⁴ The sweeping effects of English arrows at Agincourt limited movement for the French lines, which were further bogged down by the muddy conditions of the battlefield.

We face greater challenges than any previous generation as access to modern technology creates a new challenge within the human dimension of war. Just as the French knights experienced, today's Marines are hit with many increasingly

advanced threats as a result of actions taken online, with the potential for our adversaries to blanket cyber-attacks on mass formations in just a few hours.¹⁵ Utilizing technology dating back to the mid-1990s, modern cyber-attacks—like phishing and the evolving use of deep-fakes—allow malign actors to reinforce extremists, control dialogue, and create opportunities for our Marines to incriminate themselves.¹⁶ Adversary employment of artificial intelligence and bots to launch volleys of cyber-attacks against our Nation can result in an Agincourt-like moment for our Corps if we are not prepared to adapt to the changing face of war.

Our adversaries have us in range. Poor online conduct creates unnecessary gaps for our adversaries to exploit. Adversary innovations in cyber-attacks create new venues through the increased access to potential victims. Sustaining military advantages will require integrating new education of and defenses against the cyber threat into our posture while continuing to study how our adversaries are developing their use of technology.¹⁷ Key to this education is an emphasis on the unifying theme of fidelity to our country and our ethical standards—and the constant choice to maintain dedication to both. S.L.A. Marshall's definition of fidelity is key to defining the future force within the

developing cyber domain: "The derivative of personal decision ... the jewel within reach of every man who has the will to possess it."¹⁸ Disruptive operations conducted by malicious actors in the cyber domain create new challenges for our Marines and highlight the need for us to reinvest in our Service's obligation to uphold the fidelity associated with our shared soldierly virtues.

The Best Troops in the German Army

Leadership is the intangible sum of those qualities that inspires men and women into action.¹⁹ It is a passion for excellence and a pursuit of moral and mental discipline cultivated through the lifelong pursuit of education. Unique to the profession of arms, leadership includes the focused study and mastery of our warfighting philosophy. The sum of the aforementioned qualities creates *esprit de corps*, which is manifested in the cohesion of a disparate group of ages, locales, and backgrounds under a common framework of ethical standards. The interwar period between World War I and World War II provides an interesting example of how leadership is the asymmetric advantage in war.

In the 1930s, the French undertook a modernization campaign of their military equipment, to include the addition of motorized and mechanized units, anti-tank weapons, and improved communications systems while relying heavily on their fortifications in the Maginot Line.²⁰ Developments in French doctrine emphasized amassing modern armored and motorized divisions, and their innovations thrived, but they did not increase the training for their troops.²¹ The German military was limited by the Treaty of Versailles, which mandated the reduction from 1.9 million troops in their army during World War I to only 100,000 afterward while also limiting weapons and ammunition stockpiles.²² Germany's internal focus during the interwar period consisted of an open and honest system of professional military education and after-action reviews to develop a more highly trained soldier with an emphasis on instilling a sense of belonging and common identity.

The French were materially better equipped than the Germans, but their soldiers lacked training that fostered a common identity. The German soldiers were well-trained and unified by a system of effective tactics and leadership skills deliberately honed during the interwar period and their assistance in the Spanish Civil War, followed by their annexation of Austria, Czechoslovakia, and Poland. The Germans also re-organized themselves and refined their tactics after each campaign.

In May 1940, the German Panzer Divisions attacked the technologically superior French 55th Infantry guarding Sedan, where the French did not effectively integrate or employ their tanks. Germany was able to win the Sedan Offensive in three days, quickly breaking French lines and resulting in the destruction of the French and British armies.²³ In his trilogy on the epic battles between Germany and France, Alistair Horne summarized the Battle of Sedan by saying,

Despite the French artillery and antitank fire, few of the Panzers [were] knocked out ... [the] poorly trained [French] were in no way a match for the best troops in the German army.²⁴

Leadership, not technological superiority, resulted in a decisive victory for the Germans at Sedan.

The lessons learned from the 1940 Battle of Sedan highlight the responsibility to dutifully care for, educate, and empower our Marines. The Nation entrusts its leaders in the profession of arms to hold themselves to a higher standard of righteousness and virtue. Our oath to the Constitution exemplifies this higher standard; it is our unifying standard and our source of strength. As our Service's future force developments continue to integrate new technology and capabilities, we must ensure all capabilities are integrated with the qualities of sound and fit leadership, or we risk making the same mistake the French did prior to their defeat at Sedan.

Trials, Tribulations, and Trust

Our relationship with Congress and the need to maintain credibility have consistently required us to inno-

vate and be better prepared for future conflicts. Additionally, the proud name and reputation previous generations of Marines made for the Marine Corps is one we want to uphold for the coming engagements we will face—whether in conventional, unconventional, or cyber warfare.

On the eve of the Iraq War in March 2003, then-MajGen James N. Mattis addressed the 1st Marine Division in Kuwait: “Use good judgment and act in the best interests of our Nation. You are part of the world’s most feared and trusted force.”²⁵ The trust he carefully refers to manifests itself in our relationship with the American people through Congress. This trust is sacred to the Corps’ existence because it is hard earned and easily lost. Maintaining the trust of our Nation is critical to the fulfillment of our Service roles and functions as prescribed by Congress.²⁶

In *First to Fight*, LtGen Krulak highlights the challenges faced by our Corps from its birth through its relatively modern existence. He demonstrates how every threat to our survival was critical in shaping our character. He shows how our forefathers fought for statutory protection from extinction, leading up to the National Security Act of 1947. He tells the story of how, through resolve, dependability, and foresight, we were able to secure a permanent seat at the table of the Joint Chiefs of Staff in 1978. Finally, he describes how we demonstrated, through courage and innovation, that the Corps seeks and is capable of tasks across the range of military operations.²⁷

In all of these stories, the Marine Corps prevailed because of our relationship to Congress and the trust of the American people. Like our doctrine, this trust provides a baseline for action that shapes all other decisions. It is central to the three things the American people expect when they think of Marines: “[W]hen trouble comes to our country there will be Marines ready to do something about it,” “they believe that when the Marines go to war they invariably turn in a performance that is dramatically and decisively successful,” and “that our Corps is downright good for the manhood of our country.”²⁸

Setting and maintaining high standards were key to the success of the Marine Corps when the Nation implemented the All-Volunteer Force in 1973. As we adapt to new technologies and future operating concepts, the trust we have established with the Nation continues to be what draws the right talent to us. Military professionals have a responsibility to act on behalf of the American people and to do so in a way that continues to foster public trust.²⁹ Just as trust is the unifier in this complex environment, we must continue to develop trust with the American public as we develop subsets of specialties in the future environment.

Warfare is Evolving

History demonstrates that human interaction within the characteristics of the nature of war is the asymmetric advantage in the changing character of war. In *Redefining the Modern Military*, Nathan Finney and Tyrel Mayfield argue that with each new iteration of technology, the modern military must develop new core competencies in the discipline and ethics it requires.³⁰ We need to take a hard look at the widespread misconduct discharges over the last ten years and re-evaluate the health, readiness, and resiliency of our force. Increased challenges in the cyber domain create a state of persistent tension, particularly as we delegate responsibility, authority, and access to more junior leaders; this has created a new fourth block to the 1990’s “Three Block War” model. Our collective dedication to possess those unifying values unique to the profession of arms will be the new challenge for the “Strategic Corporal” to either defend us from or allow us to experience our own Agincourt-like moment.

Warfare is evolving. While the physical character of war will undoubtedly change, our trust with the American people must always permeate every specialty within our Corps. Trust is a shared obligation within our Service to sustain the dignity, moral principle, and integrity of the Corps. Our earned trust has historically contributed to our ability to respond to short-notice expeditionary tasks. This same trust will



History demonstrates that human interaction within the characteristics of the nature of war is the asymmetric advantage in the changing character of war. (Photo by SSgt Jordan Gilbert.)

certainly affect our readiness and ability to conduct expeditionary operations in the future.

In his guidance, Gen David H. Berger notes that the centerpiece of our Corps is the individual Marine. We are not defined by programs, organizational constructs, or missions—but by our collective character as Marines, fulfilling our Service’s roles and functions as prescribed by Congress.³¹ History shows that leadership—human interactions and a force built on character, ethos, and values—continues to be the asymmetric advantage in any complex and dynamic environment. The preservation of the Corps depends on this leadership to inspire and develop our greatest asset: our Marines.³²

Notes

1. COL Jess Denton, “Fight Power and the Maintenance of Combat Strength,” (Carlisle, PA: U.S. Army War College, May 1983).
2. LTGEN James M. Dubik (Ret), “Has Warfare Changed? Sorting Apples from Oranges,” Association of the United States Army, (Online: July 2002), available at <https://www.ausa.org>.
3. Headquarters Marine Corps, *MCDP 1, Warfighting*, (Washington, DC: June 1997). See also, “Has Warfare Changed? Sorting Apples from Oranges.”

4. Gen David H. Berger, *Commandant’s Planning Guidance*, (Washington, DC: 2019).
5. Headquarters Marine Corps, “The Commandant’s Posture of the U.S. Marine Corps PB19—Executive Summary,” (Washington, DC: 2019).
6. Department of Defense, *National Defense Strategy*, (Washington, DC: 2018).
7. *MCDP 1, Warfighting*.
8. Hans Mark, “Technology and the Strategic Balance,” *Technology in Society*, (Amsterdam, NL: Elsevier, 1982).
9. Ian Sullivan, “The Myth of Agincourt and Lessons on Army Modernization,” *Mad Scientist Laboratory*, (Online: July 2019), available at <https://madsciblog.tradoc.army.mil>.
10. “The Myth of Agincourt and Lessons on Army Modernization.”
11. “The Myth of Agincourt and Lessons on Army Modernization.”
12. David Whetham, “The English Longbow,” in *The Hundred Years War (Part II)*, (Leiden, NL: Brill Academic Pub, August 2008).
13. “The English Longbow.”
14. “The English Longbow.”
15. Frank Adkins and Shawn Hibbard, “The Coming Automation of Propaganda,” *War on the Rocks*, (Online: August 2019), available at <https://warontherocks.com>.
16. “The Coming Automation of Propaganda.” See also, Keceilah Rekouche, “Early Phishing,” (Ithaca, NY: Cornell University, June 2011).
17. *National Defense Strategy*.
18. S.L.A. Marshall, “The Armed Forces Officer, Edition of 1950,” (Washington, DC: Department of Defense, 1950).
19. *MCDP 1, Warfighting*.
20. Alistair Horne, *To Lose a Battle*, (New York, NY: Penguin Books, 2007).
21. Staff, “The French Army Between the Wars,” *Global Security*, (Online), available at <https://www.globalsecurity.org>.
22. Patrick Kiger, “The Treaty of Versailles Punished Defeated Germany with These Provisions,” *History*, (Online: June 2019), available at <https://www.history.com>.
23. Daniel Davis, “The Super Simple Reason Nazi Germany Crushed France During World War II,” *National Interest*, (Online: February 2017), available at <https://nationalinterest.org>.
24. *To Lose a Battle*.
25. Gen James Mattis, “Eve of Battle,” *Free Republic*, (Online: April 2003), available at <http://www.freerepublic.com>.
26. *Commandant’s Planning Guidance*.
27. LtGen Victor Krulak, *First to Fight*, (Annapolis, MD: Naval Institute Press, 1999.)
28. *First to Fight*.
29. Isaiah Wilson and Michael Meese, “Officership and the Profession of Arms in the 21st Century,” in *Fundamentals of Military Medicine*, (Fort Sam Houston, TX: Borden Institute, 2019).
30. Nathan Finney, *Redefining the Modern Military*, (Annapolis, MD: Naval Institute Press, 2018).
31. *Commandant’s Planning Guidance*.
32. *Commandant’s Planning Guidance*.

