

Decentralized Decision Making

A paradigm-shift in thinking for NATO and future U.S. alliances in the Asia Pacific region

by Col Mark C. Boone

“Never tell people how to do things. Tell them what to do and they will surprise you with their ingenuity.”¹

—GEN Patton

The 21st century has ushered in an era of intense technological advancement, changing the character of warfare. Hypersonic weapons, autonomous platforms, ubiquitous sensors, big data, quantum science, additive manufacturing, and artificial intelligence are but a few of the technological developments changing the landscape of the world and warfare as we know it. The conduct of warfare, from its fundamental principles to ethical framework, is being challenged.

As state and non-state actors alike strive for overmatch in this technological arms race, the West, namely the United States along with its fellow NATO allies, currently possesses the human resources required to develop, maintain, and hone overmatch at all levels of warfare. The West can ensure intellectual overmatch by fostering a culture of decentralized decision making where a relationship of trust and mutual understanding exists between leaders at all levels. It is based upon understanding “intent” and where the encouragement of subordinate-driven

>Col Boone is currently serving as the Deputy Chief of Staff, Marine Forces Europe/Africa and is a first-year PhD student at the University of Charleston, WV, where he studies executive leadership.

initiative and decentralized decision making at all levels is *expected*.

This requires a revolution in thinking, a paradigm shift institutionalized across the NATO enterprise. Change must occur across our institutions from our entry training to our career professional development and unit certification processes. A culture of kinship, trust, and mutual respect among leaders at all levels needs to be revitalized. If NATO can do this, true primacy will be gained at all levels of warfare resulting in speed, tempo, and battlefield lethal-

and India will require substantial assistance in technological development and mindset.

“U.S. Forces could, under plausible assumptions, lose the next war they are called to fight.”²

—RAND Corp. 2017

The conduct of warfare ... is being challenged.

ity far surpassing our adversaries. As the U.S. DOD—namely the Marine Corps—approaches capacity and alliance building throughout the Asia Pacific, this same developmental calculus must be considered. Time, space, and disaggregated operations throughout this region will require decentralized decision making of the highest order. Long standing partnership such as Australia will be well suited to make this paradigm shift, however, emerging security partners, such as Vietnam

The Battlefield of the Future

Future battlefields will be volatile, uncertain, complex, and ambiguous (VUCA).³ They will be trans-regional, multi-functional, and multi-dimensional, requiring enhanced joint interoperability well inside the adversaries’ weapons engagement zone.⁴ Communications will be degraded, the massing of any assets or personnel will be costly, and all domains, air, land, sea, cyber, and space will be contested.⁵ Massive convergence of capabilities in time and space across all domains, physical and non-physical, will be required. Electromagnetic signature reduction will become the new art of camouflage and immediate combat decisions will be made through sheer instinct, frontline

analysis, and most importantly, a clear understanding of mission objectives. “Commanders intent” will rule the day.

“The most important six inches of the battlefield is between your ears.”⁶
—Gen James Mattis

Hooked on Technology

After nearly two decades of counter-insurgency (COIN) centric conflict in the Middle East, the United States has an entire generation of officers, many now senior, who have grown quite dependent on technology. An operational environment of airspace dominance, instantaneous access to information, uninterrupted communications, and the unblinking eye of unmanned platforms providing realtime battlefield imagery has created a generation of leaders with an insatiable appetite for information.⁷ Worse, this environment has eroded our decentralized decision making. Decisions are now made levels above where they should be because of the technological ease of involvement and a desire for absolute precision. When senior officers step down from the strategic or operational levels of warfare into the tactical, they create esentment, a lack of trust, uncertainty amongst subordinate leaders, and an environment of dependency.⁸

The problem of technologically driven command and control (C2) and decision making has been further exacerbated through the application of COIN principles during the last two decades of operations. COIN involves significant measures to embrace the local population with strict avoidance of collateral damage. Avoidance of unnecessary civilian casualties and protection of non-combatants are principles of warfare enshrined in International Humanitarian Law and the Geneva Conventions; however, COIN application took these principles to levels unforeseen before in warfare resulting in constriction of authorities, reduced subordinate initiative,

and direct involvement and oversight by senior commanders in tactical operations with suboptimal results.

This has resulted in an overly centralized command philosophy where decisions are made after massive data analysis to examine all exigencies, thus stifling subordinate initiative and development.⁹ Under the auspices of these unrealistic expectations, the targeting authority for lethal actions has been removed from the operator and restricted to upper echelon decision makers. Decisions that should be made by captains are now being made by colonels. Precious time is lost when the targeting decision cycle requires approval from a hierarchal chain of command.¹⁰ The future VUCA environment will not permit this manner of operations. Approval authority for kinetic and non-kinetic fires will need to be maintained at battalion, company, and at times squad level.

“The higher the authority, the shorter and more general will the orders be. The next lower command adds what further precision appears necessary. The detail of the execution is left to the verbal order, to the command. Each thereby retains freedom of action and decision within his authority.”¹¹

—Gen Helmet von Moltke, 1869

Auftragstaktik: A Philosophy of the Art of War and Leadership

At the turn of the 19th century, the Germany Army developed *Auftragstaktik*, a new philosophy for waging war. Designed to enhance speed of action,

Auftragstaktik was refined during the internal struggles of trench warfare in World War I, resulting in the operational concepts of the elastic defense in 1916 and the assault tactics of 1918. Following the war, these concepts were further developed in the German Army Field Manual of 1933, which promoted the aggressive Blitzkrieg tactics of World War II.¹²

Auftragstaktik was not simply the issuance of mission command orders, a C2 system, or laissez-faire free for all. It was a way of thinking, encompassing an understanding of warfare, leadership traits to be exemplified, command and control, mission command orders, and an emphasis on relationships. This new way of thinking was institutionalized through the training and education of the entire force, introduced during basic training, and continued throughout their careers. Leaders at all levels embraced these groundbreaking concepts and developed a professional kinship based on trust and knowledge of each other’s abilities.¹³

Auftragstaktik was a broad-based institutionalized philosophy encompassing the art of warfare, the strength of which was anchored in *relationships*. Relationships based upon mutual trust, keen insight into each other’s abilities, and respect amongst warriors. It was an environment where commanders at all levels developed the “*What*” of commander’s intent with the expectation that subordinates would exercise the full scope of their initiative, experience, intellect, and ingenuity to derive the “*how*” of mission accomplishment.¹⁴ Subordinate driven action and decision making was not just expected; it was an institutional vow. Mistakes were expected and corrected as part of professional development, while inaction or indecisiveness was not tolerated.¹⁵ Critical thinking and a joy of responsibility were derivatives of self-generated discipline, and the Germans understood the importance of operating one up and thinking two down.¹⁶ Auftragstaktik created a culture of decentralized decision making with a universal understanding that no operational plan survived contact with the enemy and a belief that every action in combat is

unique, requiring initiative, rapid assessment, and aggressive action.¹⁷

“There are no secrets to success. It is the result of preparation, hard work, and learning from failure.”¹⁸

—GEN Colin Powell

Developing a Culture of Decentralized Decision Making

Since World War II, several American military organizations have attempted to replicate the theory of *Auftragstaktik*. The Army has made strides with its development of Mission Command and the Adaptive Leadership Training and Education model focused on problem solving skills and critical thinking; however, neither have been institutionalized across the force.¹⁹ The DOD pioneered the “Joint All Domain Command and Control System” to enhance decision making at lower levels, but this concept is still embryonic.²⁰ The Marine Corps, renown for adaptability and emphasis on their NCO leadership, has released *MCDP 7, Learning*, outlining a visionary philosophy where the mind is the weapon surpassing all forms of technology.²¹ Despite these measures, the overall focus across the joint force remains on centralized decision making.

The true spirit of *Auftragstaktik*, understanding “intent,” the inherent relationship between leaders, and the delicate balance between authority and responsibility has been overlooked and has not been institutionalized in U.S. military training centers and universities.

A complete paradigm shift in thinking is required in our teaching methodologies from “*what to think*” to “*how to think*.” A cognitive leap must be made from competency-based learning to outcome-based learning. Our training institutions must shift from report card box-checking to discovery learning and

development. This change must cover the entire educational spectrum from our entry-level training to our senior level professional development and must be institutionalized in our training centers for deployment and combat readiness.²² Additionally, this must include joint multi-domain exercises in a C2 denied environment, challenging and stress checking our processes, equipment, and people.²³

Emotional intelligence must be a key attribute of leadership allowing for subordinate level involvement in decisions and outcomes. We need to instill

The King of Domains: The Human Domain

Message to the Joint Force 2015

Critics argue that decentralized decision making and mission command are dying concepts. An argument is made that technological advancements in artificial intelligence, quantum computing, and big data analysis will overcome the need for critical thinking and human decision making on the battlefield. Leaders will be replaced by machines, and fighting will be done largely by unmanned platforms.²⁵ History will prove them wrong. History is already replete with

A cognitive leap must be made from competency-based learning to outcome-based learning. Our training institutions must shift from report card box-checking to discovery learning and development.

the importance of developing deep and enriching professional relationships throughout the force, relationships developed through shared hardships, rigorous real-world training, and in places like the officer and staff-NCO clubs, where tactics and life lessons are shared from teacher to scholar.

inventions that have changed how war is fought but not its essential nature. These innovations will also fall into that category.²⁶

The inventions of today and tomorrow will create a new paradigm in warfare, one in which the Sailor, Soldier, Marine, or aviator enabled by technology, will still be required to make decisions.²⁷ We currently have the domains of sea, air, land, cyber, and space; however, the human domain reins above all. Future warfare will be faster, more lethal, and more dispersed than ever witnessed before. Leaders at all levels will operate off instinct and commander’s intent in an environment of degraded communications, cloaked identification, strained supply lines, and extremely dispersed formations. The emergence of new weapons with significant range and lethality will require forward unit control. In this environment, decentralized decision making will become even more paramount and small unit leaders at the company and squad level will require operational authorities historically maintained at the brigade level and higher.

Undoubtedly, to assist leaders, emerging technologies to enhance decision-

“The future operating environment will place new demands on leaders at all levels. Our leaders must have the training, education, and experience to meet those demands.”²⁴

**—Gen Joseph F. Dunford Jr.,
36th Commandant of
the Marine Corps**



Training among NATO Alliance members, in this case Armenia, Italy, Poland, Spain, and the United States, can help to develop the necessary culture of tactical initiative and bias for action at the small unit level. (Photo by Sgt Henry Villarama.)

making processes should be explored and utilized. Technologies, such as the Defense Advanced Research Projects Agency Deep Green, a system to enter into the adversarial decision-making process or the Real-Time Adversarial Intelligence and Decision Making, which uses predictive analysis and simulations to analyze enemy actions, should be further analyzed.²⁸ Another emerging technology to enhance decision making is Think, Analyze, and Connect, a massive search engine for analysis being implemented by the Defense Threat Reduction Agency for collaboration and decision making.²⁹ The Joint Assistance for Deployment Execution, designed for planning and course of action comparison, is yet another within this family of systems.³⁰

With the emergence of the Global Information Grid, everyone now has access to the same data. Senior leaders, non-natives to the digital era, are at a distinct disadvantage. Anyone harboring information at higher echelons will quickly become irrelevant and part of the problem.³¹ Knowledge is only powerful if it is shared and sharing information must be viewed as a way to enhance decision making amongst subordinates. The German model of *Auftragstaktik* placed emphasis on the tactical commander for flexibility in making decisions to affect the overall intent.³² Technology should not be

used as a means to micromanage but to enhance our subordinates' ability to observe, orient, decide, and act faster than our enemy.³³

Now, in an era of advanced technologies with the potential to create over supervision, more emphasis must be placed upon the issuance of clear and concise commander's intent, the sine qua non between the mission and the concept

Training must be challenging, setting conditions for a real-world experience ...

of operations.³⁴ Decentralized decision making is the only way to harness the collective energy of the joint force enhancing lethality and survivability on the modern battlefield. The concept of the "Strategic Corporal" is still valid and needs to be rekindled.³⁵ At the same time, we must focus the development of our senior leaders on the strategic application of all instruments of national power, critical thinking, and the art of enabling decentralized decision making by their subordinates.³⁶

***"I do not propose to lay down for you a plan of campaign ... but simply to lay down the work it is desirable to have done and leave you free to execute it in your own way."*³⁷**

—GEN Grant's Instructions to GEN Sherman (1864)

Enabling the Paradigm Shift

Much has been written about the future of warfare. We know it will be trans-regional, multi-domain, and multi-functional. New technologies will emerge altering the very character of warfare and victory will go to those who harness the chaos of the VUCA environment using speed and tempo to enhance their lethality. The future battlefield will require decentralized decision making with operational authority pushed to the lowest level possible. In this complex and volatile environment, NATO can establish and maintain strategic and operational primacy over our adversaries through investment in our human capital. To achieve this, NATO must revolutionize the way we think from "what to think" to "how to think." This radical change must be institutionalized across the force from the onset of training through career progression. Training must be challenging, setting conditions for a real-world experience where all domains are contested. It must stress test our people, equipment, and processes to ensure operational readiness and resilience.

What the Alliance needs is a new culture of *Auftragstaktik* where commanders develop true relationships with their subordinates, a culture where the commander's intent is the watch word of operations, and where the "how" of mission accomplishment is left to subordinates. We must foster an environ-

ment where our subordinates know to take action in the absence of orders. We must train to an expectation of initiative and encourage them to employ their ingenuity, experience, and knowledge of the environment to ensure that the commander's vision becomes a reality.

Notes

1. John Nelsen, *Auftragstaktik: A Case for Decentralized Battle*, (Fort Belvoir, VA: Defense Technical Information Center, 1987).
2. Christian Brose, "The New Revolution in Military Affairs," *Foreign Affairs*, (May/June 2019), available at <https://www.foreignaffairs.com>.
3. Elena Palloni, "Educating to Cross-Cultural Competence The Case of the NATO Defense College," in *Eisenhower Paper* No. 8, (Rome: NATO Defense College, 2018).
4. Paula Thornhill and Mara Karlin, "The Chairman the Pentagon Needs," *War on the Rocks*, (January 2018), available at <https://warontherocks.com>.
5. "The New Revolution in Military Affairs."
6. Headquarters Marine Corps, *MCDP 7, Learning*, (Washington, DC: March 2020).
7. "The New Revolution in Military Affairs."
8. Tom, "Mission Command; The Fall of the Strategic Corporal & Rise of the Tactical Minister," *Wavell Room*, (May 2018), available at <https://wavellroom.com>.
9. *Auftragstaktik: A Case for Decentralized Battle*.
10. Ibid.
11. Donald Vandergriff, "How the Germans Defined Auftragstaktik: What Mission Command Is—AND—Is Not," *Small Wars Journal*, (June 2018), available at <https://smallwarsjournal.com>.
12. *Auftragstaktik: A Case for Decentralized Battle*.
13. "How the Germans Defined Auftragstaktik."
14. Staff, "The Prussian/German Way of War. Soldiers and Teams," *Auftragstaktik*, (n.d.), available at <https://www.auftragstaktik.eu/>.

15. "How the Germans Defined Auftragstaktik."
16. Richard Simpkin, "Command from the Bottom Up," *Infantry A Professional Journal for The Combined Arms Team*, (Fort Benning, GA: U.S. Infantry School, March–April 1985).
17. *Auftragstaktik: A Case for Decentralized Battle*.
18. *MCDP 7, Learning*.
19. Donald Vandergriff, "How to Develop for Mission Command: The Missing Link," *Small Wars Journal*, (June 201), available at <https://smallwarsjournal.com>.
20. Paul Birch, Ray Reeves, and Brad Dewees, "Building the Command and Control 'Building the Command and Control of the Future from the Bottom Up,'" *War on the Rocks*, (January 2020), available at <https://warontherocks.com>.
21. *MCDP 7, Learning*.
22. Frank Hoffman, "Winning Wars and Military Education: Crossing Both Spans of the Strategy Bridge," *Foreign Policy Research Institute*, (May 2018), available at <https://www.fpri.org>.
23. "Building the Command and Control"; and Peter Hickman, "The Future of Warfare Will Continue to Be Human," *War on the Rocks*, (May 2020), available at <https://warontherocks.com>.
24. *MCDP 7, Learning*.
25. Dumitru Minzarari, "From Deception to Attrition: AI and the Changing Face of Warfare," *War on the Rocks*, (February 2020), available at <https://warontherocks.com>.
26. Fisher Sophie-Charlotte, Andrea Gilli, and Mauro Gilli, "Technological Change and Grand Strategy," in *Oxford Handbook of Grand Strategy*, eds. Thierry Balzaq and Ron Krebs, (Oxford: Oxford University Press, 2020).
27. BGen George Allen, "Brig. Gen. George J. Allen, USMC," *SIGNAL Magazine*, (January 2015), available at <https://www.afcea.org>.
28. Johan Schubert, Joel Brynielsson, Mattias Nilsson, and Peter Sevmarck, "Artificial Intelligence for Decision Support in Command and Control Systems," (Pensacola, FL: International Command and Control Research Symposium, November 2018); and Robert Rasch, Alexander Kott, and Kenneth Forbus, "Incorporating AI

into Military Decision Making: an Experiment," (New York, NY: IEEE Intelligent Systems, 2003).

29. CBRNE Central Staff, "Counter-WMD Intelligence: Think, Analyze, Connect and MidPoint Contract Award to Boeing," *CBRNE Central*, (January 2019), available at <https://cbrnecentral.com>.
30. "Artificial Intelligence for Decision Support in Command and Control Systems."
31. Allen Smith, Horizon, "Over the Convergence within SOCOM—A Bottom-Up Approach to Multi Domain Operations," *OTH*, (April 2020), available at <https://othjournal.com>.
32. Staff, Technology and Leadership," *Armed Forces Journal*, (January 2014), available at <http://armedforcesjournal.com>.
33. *MCDP 7, Learning*.
34. Richard Dempsey and Jonathan Chavous, "Commander's Intent and Concept of Operations," *Military Review*, November–December 2013).
35. Annis Franklin, "Krulak Revisited: The Three-Block War, Strategic Corporals, and the Future Battlefield," *Modern War Institute*, (Fort Leavenworth, KS: Army University Press, February 2020).
36. "Winning Wars and Military Education."
37. *Auftragstaktik: A Case for Decentralized Battle*.

