Use 'Mental Models' to Outthink the Enemy

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By the end of August 1944, Gen. George S. Patton Jr.'s III Corps had left a swath of destruction across Europe. They had captured or destroyed over 4,300 German tanks, artillery pieces and vehicles while losing fewer than 500 of their own tanks and artillery. Even the death toll was lopsided. As of Aug. 23 of that year, the Germans had lost 16,000 soldiers, killed at the hands of III Corps, compared to approximately 2,000 U.S. service members killed in action.

Patton's rapid 500-mile trek across Europe can be summed up in one word: Attack! The speed at which he moved left the Germans confused, and it paved the way for the Allies' race to the Rhine.

Almost 60 years later, in the summer of 2002, retired Marine Corps Lt. Gen. Paul Van Riper led the opposing force during Millennium Challenge, a joint forces exercise simulation. He played the role of a rogue Middle Eastern commander whose technological capabilities paled in comparison to those of the U.S. The purpose of Millennium Challenge was to validate a new way in which the U.S. military fought. During the 1990s, leaders thought that technology would lift the fog of war and allow U.S. commanders to see first, understand first, then act decisively.

Van Riper's performance during the exercise proved that the contemporary U.S. way of warfare was inconsistent with the nature of war. He used asymmetric methods to counter technological dominance, couriers instead of cellphones to communicate among his forces, World War II-era practices to get his airplanes off the ground when his communications systems

Gen. George S. Patton Jr. in Germany in 1945

prerequisite to military genius in his book *On War*. Great military commanders intuitively understand the power of this idea and deliberately supplement their experiences with the practice of reading and reflection. They do not rely on the organization for development; they take their development into their own hands.

Reading Shapes Patton

Patton's way of war, for example, was not shaped by doctrine and field problems alone. Throughout his life, he complemented his experiences with a disciplined effort of reading and self-study. As his wife, Beatrice Ayer Patton, recounted in a 1952 edition of *Armor* magazine, by the age of 8, young George was familiar with the works of Homer, William Shakespeare and Sir Arthur Conan Doyle. These books and plays, which were the fictional reflection of the human condition in conflict, shaped the future general from a young age.

Patton continued the practice of reading into his early 20s, using the margins of books, notebooks and notecards to capture his thoughts and reflections, further enhancing his self-development. As a cadet at West Point, he scribbled "rear attack" and "flank attack" in the margins of his books. Decades later, these words would define his aggressive nature as a field commander.

During his senior year at the military academy, Patton wrote that to become a great soldier, it was important "to be so thoroughly conversant with all sorts of military possibilities that whenever an occasion arises, he has at hand without effort on his part a parallel."

To achieve this, Patton wrote, "I think that it is necessary for a man to begin to read military history in its earliest and hence crudest form to follow it down in natural sequence, permitting his mind to grow with his subject until he can grasp without effort the most abstruse question of the science of war because he is already permeated with all its elements."

Patton took extensive notes on Frederick the Great, Napoleon Bonaparte, Ardant du Picq and Helmuth von Moltke, studying not only their successes but also their failures. Roger Nye, author of *The Patton Mind: The Professional Development of an Extraordinary Leader*, wrote that the source of Patton's genius was "in his library and in on-the-job learning, rather than in the Army schooling system; his less creative contemporaries averaged more than 10 years in student and faculty time while Patton served little more than four years."

After World War I, Patton could have rested on his wartime experiences, claiming that he was combat-tested and ready to lead at higher levels of responsibility. But he didn't. He used the period between the wars to continue to develop the mental

were knocked out, and a surprise attack on Navy ships—which would have killed approximately 20,000 service members and sunk 19 ships. His technologically inferior force outthought and outfought the U.S. military in the exercise.

While Van Riper and Patton served in different capacities and in different eras, they both dominated the battlefields where they fought. One reason was that both complemented their experiences with a lifetime of self-study, gaining an understanding of war and warfare and thus, developing "mental models" that allowed to them to outthink, outsmart and outfight their opposing commanders. These mental models were the foundation of their competitive advantage, and their personal examples should provide leaders with the impetus to adopt the same practices in their own careers.

Lifetime of Experience, Education

Mental models or schemas are prerecorded bits of information stored in our brains that enable us to quickly understand the world. They also influence how we take action. Mental models are developed through a lifetime of personal experiences and education. They are the reason two individuals can look at the same information, or two commanders can look at the same terrain, and draw two very different conclusions. The types and variances of experiences, and how we make sense of them, will determine how our mental models are shaped.

Even military strategist Carl von Clausewitz commented on the power of mental models when he discussed coup d'oeil as a

models that would later lead him to victory over the Germans.

He also shared his growing understanding of war and warfare with his subordinates, giving weekly lectures to the officers in his unit. Some of these officers would later enable him as a commander, as they served on his staff during his breakouts in World War II.

Like Patton, Van Riper began his intellectual journey early in his military career. In an essay titled "The Relevance of History to the Military Profession: An American Marine's View," he recounts the books he read from the rank of private to lieutenant general and how they shaped his mental models. He discusses reading S.L.A. Marshall's *Men Against Fire* as a company grade officer and how the book impacted his leadership decisions during field exercises. He shares how T.R. Fehrenbach's *This Kind of War* led him to develop challenging training and enforce discipline in his organizations.

Van Riper says studying the past enables "practitioners of war to see familiar patterns of activity and to develop more quickly potential solutions to tactical and operational problems."

'Symbiotic Connection'

"I could never identify a direct cause-and-effect relationship between the orders I gave in combat and the books I previously read," he writes, "but clearly a symbiotic connection existed."

The essay spans several decades and several hundred books and articles, but the point is clear and succinct: Van Riper's habit of self-development gave him the intellectual tools necessary to move beyond conventional thought and doctrine to develop the mental models required to win.

"The proof of the value of reading is not straightforward. Performance on the battlefield provides the final test," he writes. His performance in Millennium Challenge is proof that his practice of reading throughout his career helped him succeed on the battlefield.

Van Riper focused on his own development; he also encouraged subordinates to do the same. As a division commander, he set an hour aside on his daily schedule for professional reading, with the hope his subordinate leaders would follow suit. He directed the purchase of 6,000 books for unit libraries. Finally, he hosted a monthly reading group at his quarters in which lieutenants through major generals discussed a book they were reading together.

See What Others Miss

Both Patton and Van Riper spent decades building mental models on the foundation of a deep understanding of war and the human condition. They read history, the humanities and biographies that enabled them to lead, fight and develop the next generation of leaders. Their efforts allowed them to see what others missed and not only interpret events through well-developed lenses but also act faster than their opponents.

We do not have to wait for our leaders or professional military education institutions to develop us. We can follow the example of these two individuals and start developing the mental models that will help us fight and win our nation's wars. And we can begin our journey of developing mental models no matter where we are in our careers. This will positively influence our training, our leadership, and how we fight.

I recommend starting with the Maneuver Leader Self Study Program, and picking a book or article that interests you. Join the sergeant major of the Army's book club, a program that looks to focus on one book each quarter. Peruse articles from *ARMY* magazine, *Military Review*, *The Strategy Bridge*, *Small Wars Journal* or *The Military Leader*.

As we continue to train in preparation for the next war, we need leaders with mental models that go well beyond field exercises and doctrine. We need leaders who can outthink, outsmart and outmaneuver the enemy. This can be achieved only by following in the footsteps of Patton and Van Riper, both practitioners who dedicated their lives to the development of their intellectual abilities. ★

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U.S. Marine Corps

*Retired Marine Corps
Lt. Gen. Paul Van Riper*