



U.S. Army

General Tzu's Army:

OPFOR of the Future

By MICHAEL R. LWIN

Great expectations surround the revolution in military affairs (RMA). The Chairman has stated that taking advantage of it means providing “America with the capability to dominate an opponent across the range of military operations.” Although we may seek to acquire such dominance potential enemies will also be busy. How might an opposing force (OPFOR) attempt to defeat the Armed Forces of the 21st century? This article provides a scenario for examining the strategies of future OPFOR and concludes by analyzing enemy strategy in relation to maneuver warfare theory and looking at its implications for future defense planning.¹

Setting the Scene

For the commanding general of the American division, the battle had not really begun. His mobile strike force had been deployed to a far away theater to deter an aggressor from the

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north, or to fight and repel it if necessary.² Despite a few teams of OPFOR reconnaissance soldiers crossing the border, hostile mechanized forces were still posturing on their territory. To provide maximum time to pursue deterrence and diplomacy, U.S. forces could not begin combat operations until a credible offensive threat (for instance tanks) crossed the border.

The commander reviewed his intelligence and options with Battle Staff Bravo. Indeed, the enemy appeared to be operating pretty much as its doctrine indicated. Although thick cloud cover prevented real-time visual and infrared downlink from satellites, the feed from the joint surveillance and target attack radar system (JSTARS) II showed a long procession of armored fighting vehicles moving out from their assembly areas. Despite attempts by the enemy to destroy or deceive them, the division's long range unmanned aerial vehicles had already spotted most of the OPFOR tanks. The video images of moving tanks on display told the commander exactly what he thought he needed to know.

The general reviewed the concept with his staff. The wide valley corridor which canalized the approaching enemy division would soon become a virtual valley of death. The division cavalry squadron would delay lead OPFOR elements long enough to set them up for the kill. At H-hour, an attack helicopter battalion would hit from the west to destroy the second regiment. A rocket strike with precision guided submunitions would attrit another. At H+2, the ground brigade with two armored task forces would launch a flank attack from the east to complete the destruction of OPFOR mechanized forces.

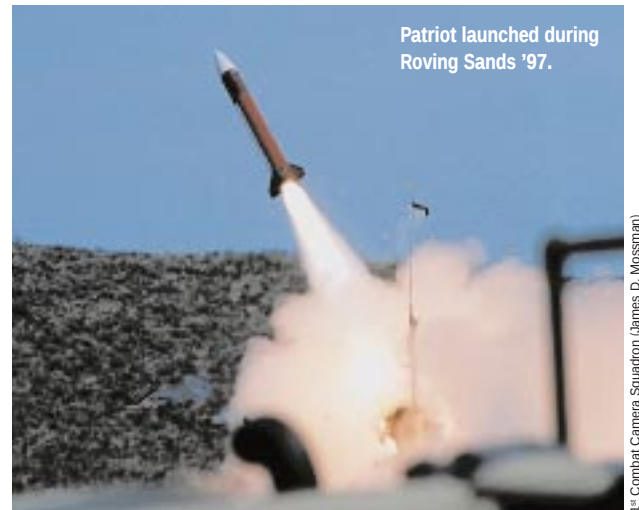
What Tzu Knew

The OPFOR army, under General Tzu, had the mission of defeating our forces to end U.S. involvement on the peninsula, allowing follow-on forces to subdue overrun territory. The general wanted to give Americans everything they expected and more. From his study of the recent war in southwest Asia, he knew U.S. capabilities provided a near perfect view of the entire battlefield—or at least its mounted battlespace. Tanks and artillery could not hide. With those facts in mind, Tzu had spent years preparing for this battle.

In the past, the doctrine of Tzu's nation had stressed that dismounted infantry forces were primarily used to defend the rugged terrain of the homeland while mechanized forces would slice

into enemy territory. Secretly, Tzu had turned this doctrine on its head. Two divisions of infantry had undergone training deep in the homeland to learn the art of infiltration, raids, and ambushes.

Tzu's plan was simple: create enough casualties to crush American will to keep their forces in the theater. Unknown to his opponents, Tzu had already committed two light infantry divisions across the border. Although the enemy had captured a few squads and platoons, Tzu



Patriot launched during Roving Sands '97.

1st Combat Camera Squadron (James D. Mossman)

knew that the Americans would not consider them more than reconnaissance elements for a mechanized force that he was massing across the border. Tzu's tanks and artillery would draw American attention.

In the three days since his soldiers had infiltrated Tzu had no contact with them. He knew that to communicate would expose their position. His mission-type orders were simple and did not require constant control. On Tzu's side of the border, however, radio traffic maintained a steady crescendo. Although his mechanized forces used some cursory encryption and frequency-hopping measures, he wanted it clearly known that he was preparing to attack. Other deception measures portrayed an entire mechanized corps ready to move.³

As lead OPFOR tanks began crossing the border, the U.S. commander received warning of an incoming ballistic missile attack. He was certain of the protection of his air defense umbrella. Five years ago an enemy in another theater of war used similar archaic modified Scud missiles in futile efforts to strike our forces. Unlike Desert Storm there was no debate about the effectiveness of the missile defense; not a single warhead detonated on, over, or near any American soldier.

The division air defense officer was surprised when an incoming missile did not begin to arc

down into the air defense coverage sector. His first impression that his display was incorrect was erased as he saw the missile detonate in the stratosphere above the division sector. OPFOR had launched the first of many low-yield nuclear weapons to generate an electromagnetic pulse (EMP) to jam or degrade C⁴I systems.

The day started well for Comanche 34, a pilot in the attack helicopter battalion. Looking at the display in his cockpit before take off, he saw a computer generated map depicting every enemy air defense radar and missile system in his area of operations. Significantly, the digital download into his system revealed that each one was destroyed, jammed, or forced off the air. From his experience in the second Gulf War, he knew that any radar which was turned on would receive an unhealthy

The OPFOR infantry battalion commander facing Johnson was satisfied. The Americans had been halted without any losses to his troops, who were armed with advanced anti-tank missiles fired from cover and guided to the target via fiber-optics. The OPFOR colonel noticed the platoon moving forward and, having inspected every fighting position, knew his men were ready.⁴

Lieutenant Smith, carrying a thirty-pound radio/digital control pack on his back and leading the platoon, began climbing the ridge. As his lead squad took fire, he knew what was happening as a small arms fire locator automatically sent a report back to him via digital link. In turn, Smith used the information to digitally request artillery fires. By then the platoon leader and his first two squads were in dense woods. Next a mortar barrage fell on the trail squad still in the open. Smith quickly ordered them into the woodline and began executing a maneuver to flank the enemy.

As they moved, Smith wondered where his artillery fires were. For some reason the digital link was down. Whether it was EMP from the nuclear skyburst overhead, the mountains masking the communication links, or simple equipment failure, he would never know. He received a frantic report: the flanking squads had run into a minefield. Now he really needed artillery. Fumbling for a map, Smith estimated his position and that of the target and called for immediate suppression fires by voice over the radio.

The colonel observed the Americans below. He expected to lose his forward line of fighting positions. American sensors and small arms were too powerful. But he knew that the difficulty of fighting through an entrenched enemy, climbing a steep slope, and breaching the minefield would exhaust and ultimately stop the heavily-laden Americans. This gave him time to adjust his mortars the old-fashioned way. Then the artillery and mortars came into play. The mortars fell on the Americans, American counterbattery fires destroyed the OPFOR mortars, and a barrage of American improved conventional munitions fell on everyone. The grid location Smith had called in was incorrect—he was dead, the platoon was depleted to combat ineffectiveness, and tankers would have to wait for more infantry to clear the ridge.

Specialist Jones drove her high mobility resupply truck in support of the ground attack. Trailing the combat battalions in a convoy of ten trucks, she was apprehensive but felt relatively secure with two battalions of tanks and Bradleys clearing the road. But as she rounded a corner, the sound of gunfire told her they might not

his battalion's main task had switched from attack to protecting search and rescue efforts

dose of 155-mm or multiple-launch rockets. A few hours later reality shattered his faith. Hovering on the reverse slope

of a wooded ridge to provide cover to a search and rescue mission, he struggled to understand why their losses were so high. A few years earlier in the Great Desert War not a single aircraft was lost to the enemy. Now his battalion's main task had switched from attack to protecting search and rescue efforts for downed air crews.

General Tzu had adopted a decidedly low tech air defense concept. His plan called for 40 dismounted platoons, each with a man-portable missile system, heavy machine gun, and blinding laser system to screen likely air avenues of approach. Acquisition was by sight or sound. Later analysis would show that of 120 missiles fired only three found their mark. Three other aircraft were shot down by machine gun fire, and two crashed after their crews were blinded by lasers. Many other aircraft were damaged. Unfortunately the U.S. commander's high resolution computer wargaming model totally discounted this mix of "obsolete" and high tech weapon systems.

The Digital Link Was Down

Abrams tanks could count on kills at 3,500 meters and kills in excess of 4,000 meters were not uncommon. But the local terrain limited most shots to 2,000–2,500 meters. And here enemy tanks were not the major threat. As Captain Johnson and the lead company team approached the defile before their main objective, a barrage of anti-tank missiles literally fell on them. After losing three tanks, Johnson ordered a halt and dismounted his infantry. Thirty-four men with the world's most advanced infantry equipment moved out to clear the ridges on either side of the defile.



Joint Combat Camera Center (Aaron N. Baudree)

UH-60s landing in central Thailand.

have finished the job. Three battalions of OPFOR infantry had infiltrated to positions astride the main supply routes. Tzu's template and instructions were well rewarded. The OPFOR company commander initiated an assault with ten enemy trucks in the kill zone. Targeting antitank missiles on security vehicles, he had stripped the Americans of the capability to respond in under thirty seconds. Well-placed machine gun fire brought the trucks to a halt. As he blew his whistle, his company assaulted into the kill zone.

The division public affairs officer was in a HMMWV behind Specialist Jones. Her mission was to escort the media forward to record the American victory. As the firing started, her driver

was wounded and veered off the road. The firing slackened, and the enemy began to assault through the decimated convoy. Without any means to

resist, she chose to surrender. As she got out of the vehicle, arms raised, an OPFOR soldier shot her dead where she stood.

The enemy infantryman next turned to the TV crew sitting in the back of the HMMWV. As he was about to squeeze the trigger, the OPFOR commander knocked the weapon out of his hands. "Fool," he shouted, "move out and clear the truck over there!" The soldier, not understanding his almost fatal mistake, ran off to execute the new order. The OPFOR commander, however, knew

the value of the media. Because of his actions the scenes of exploding supply trucks and fuelers and dead American soldiers, men and women, were broadcast on television in the United States two hours later. The commander later received his country's second highest award for this act.

The outcome of this hypothetical battle is left to the reader's imagination. It is presented to illustrate potential vulnerabilities in the digital force and possible enemy actions to exploit them.

Functional Dislocation

Maneuver warfare theory holds that one method to defeat an enemy is through dislocation, "the art of rendering the enemy's strength irrelevant."⁵ Dislocation itself comes in different forms: temporal, positional, functional, and moral.⁶ Surprise is key to each; without it an enemy can react to avoid dislocation. In this scenario the OPFOR commander uses all four types of dislocation to fight the Americans.

The fictional enemy has the initiative because of American emphasis on pursuing diplomatic initiatives to the end and a reluctance to use preemptive strategies. With the initiative, General Tzu renders U.S. forces temporally irrelevant by infiltrating main attack forces early. His troops gain surprise through stealth and American failure to recognize them as the main attack.

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Marines landing at
Kauai, Rimpac '96.

U.S. Navy (Jeffrey S. Viano)

By introducing only dismounted forces across the border Tzu postpones the outbreak of hostilities and gains time to infiltrate farther into our territory. By the time combat commences, the enemy virus is already deep in our system.

Tzu achieves positional dislocation by the nature of his forces. Using armored elements to attract attention and engage from the front, his infantry maneuvers deep on the battlefield to strike relatively soft targets in mechanized units: logistical centers, command posts, and communication nodes. Tzu's force uses weapons that bypass tanks and armored vehicles by venturing into terrain where vehicles cannot go—infantrymen.⁷

Functional dislocation is achieved by making our forces work improperly. This is done with both low- and high-tech weapons. A recent example was the Army's experience in Somalia. The use of low-tech rocket propelled grenades, an unguided, man-portable weapon designed to kill tanks, allowed poorly trained Somalis to shoot down dislocated special operations helicopters.⁸

In the foregoing fictional battle, General Tzu directly and indirectly functionally dislocates our forces. By launching multiple EMP weapons, he degrades our sensors, computers, and digital links and plays on our dependence on these systems. The young American officer, dependent on the global positioning system and digital links, loses his ability to navigate by map and compass and to call in fires by voice.

The use of nuclear weapons in a non-casualty producing role further dislocates our forces. The deterrent effect of the U.S. nuclear arsenal has failed; Tzu gambles that America will not use a weapon of mass destruction to retaliate for a weapon that has not directly killed a single soldier or civilian. Is there another form of deterrence that could prevent this type of nuclear attack? What is the response to the use of nuclear weapons as EMP generators rather than mass destruction?

Indirectly, Tzu dislocates opposing troops by attacking with forces and weapons that they are not fully prepared to fight. JSTARS and unmanned aerial vehicles may see tanks miles away, but how far off can they see soldiers walking under triple

canopy jungle? Tzu's use of a purely man-portable air defense concept is unpredicted by the staff and its computers. He also uses blinding laser and mine weapons assumed banned by international convention. Finally, he uses an infantry heavy force in close terrain, a situation in which the mobile strike force is not optimized to fight.

The question today is whether we are functionally dislocating ourselves in designing future forces. Force XXI technologies appear to add tremendous capability to fight a mounted enemy in open terrain like that at the National Training Center or in Kuwait and Iraq. But what is being done to counter dismounted soldiers in close terrain, the type of enemy who confounded U.S. forces in the hills of Korea and the rain forests of southeast Asia?

Moreover some observers think future enemies will choose forces that inherently dislocate us.⁹ Guerrillas, insurgents, and terrorists use a different form of combat, one which the so-called RMA and Force XXI have very little to say about. As we gain dominant capabilities in one type of battlespace, it only makes sense for an enemy to choose an alternative battlespace.

The last form of dislocation is moral, breaking enemy will to continue the fight. Whether because of a failure to create and sustain national will, an increasingly strong reluctance to risking American lives for any but our most vital interests, or the faster transmission of news and images, the United States appears to be highly vulnerable to moral dislocation. We have set the conditions for wars to be short and have few casualties. Vietnam, Somalia, Haiti, and Bosnia bear this out.¹⁰ And Saddam's strategy in the Gulf indicates that these lessons were not lost on others.¹¹

The future holds variables that will exercise an undetermined effect on our will. We have near instantaneous media coverage already. As this trend approaches its limits and news permeates every corner of the Nation, how will the public react in a crisis? Will information warfare involve an enemy that puts harrowing images on our TV screens? The integration of women into all areas of the military adds another variable. What will be the public reaction when both men and women suffer mass casualties on some far away battlefield? If the images relayed from Somalia in October 1993 had included dead American female soldiers would it have made any difference?

Many questions raised in this article indicate that there is still an area of uncertainty about the future despite the promise of RMA. In dislocation, there are variables that could put dominance at risk. A perceptive enemy will take advantage of them. Friction and the fog of war will provide ample opportunities to do so. Maintaining a lead

in technology will not ensure dominance. Under some conditions it may be achievable without the latest computers, communications, and weapons. Like General Tzu, we will have to find the proper mix of organization, doctrine, and technology. Only with a thorough understanding of the enemy, well configured and trained forces, and unified action can the Armed Forces be dominant over OPFOR of the future. JFQ

NOTES

¹ This hypothetical scenario abstracts the use of naval, air, and allied forces. Moreover, OPFOR organizations and characteristics are not meant to represent the future forces of a particular nation. The author would like to thank Paul Stockton of the Naval Postgraduate School for help in bringing this article to fruition and Chris Layne and John Arquilla for their comments.

² For the latest information, see *Prairie Warrior* '96 (on-line at the U.S. Army Command and General Staff College web site).

³ For deception tactics against an experimental digital force, see Richard A. Jodoin, "Opposing Force Deception Operations during Rotation 94-07," *Red Thrust Star* (January 1995), pp. 11-14. (*Red Thrust Star* is the Army OPFOR magazine at the National Training Center.)

⁴ This passage owes its inspiration to John A. English and Bruce I. Gudmundsson, *On Infantry*, revised edition (Westport, Conn.: Praeger, 1994), pp. 176-77. Chapter 10 contains insights on the importance of infantry on the future battlefield.

⁵ Robert R. Leonhard, *The Art of Maneuver* (Novato, Calif.: Presidio, 1991), p. 66.

⁶ The subdivisions and definitions of dislocation are from Robert R. Leonhard, "Force XXI and the Theory of Winning Outnumbered," *Army*, vol. 46, no. 6 (June 1996), pp. 60-62.

⁷ For a similar scenario and details on this form of maneuver see Charles S. DeVore, "Countering U.S. Heavy Forces in Rough Terrain," *Red Thrust Star* (July 1991), pp. 10-14.

⁸ See Rick Atkinson, "Night of a Thousand Casualties," *The Washington Post*, January 31, 1994, pp. A10-11. During the October 3, 1993 raid in Mogadishu, two MH-60 helicopters were shot down and two were seriously damaged by rocker propelled grenades.

⁹ For commentary on irregular warfare see Martin van Creveld, *The Transformation of War* (New York: The Free Press, 1991).

¹⁰ See Harvey M. Sapolsky and Jeremy Shapiro, "Casualties, Technology, and America's Future Wars," *Parameters*, vol. 26, no. 2 (Summer 1996), pp. 119-27.

¹¹ Lawrence Freedman and Efraim Karsh, "How Kuwait Was Won," *International Security*, vol. 16, no. 2 (Fall 1991), p. 15.

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