AS THE ARMY develops a way forward in what General George W. Casey has called an “era of persistent conflict,” it seems increasingly clear that mechanized forces are playing a diminishing role in favor of infantry-centric formations. However, while this improvisation has validity in the current operating environment, it discounts the utility of heavy forces in irregular warfare and implicitly assumes no need for armor in the future. The Army’s doctrine for irregular warfare should include employment of mechanized forces, and training should incorporate the use of mechanized forces in all types of warfare.

With the arrival of U.S. Marine Corps M1A1 tanks in Afghanistan, it may be worth considering giving mechanized forces a wider role in irregular warfare. For many, the initial view may be that mechanized forces have little or no place in the style of warfare common in Afghanistan for several mistaken reasons—the logistical burden, the perceived limitations of utility, and the relative strategic immobility. While there may be some validity in all of these criticisms, they are flawed or incomplete arguments that rely on tenuous assumptions. The primary consideration for introducing mechanized forces into irregular warfare situations should be the means of employment and type of terrain.

The Army should reconsider the applicability of mechanized formations in all types of combat operations. Doctrine should clearly express mechanized forces’ capabilities, limitations, and unique attributes in irregular warfare. Because it does not, their use is determined by local tactics, techniques, and procedures or word-of-mouth employment considerations. Such discovery learning was understandable during the early periods of combat operations in the current conflicts, but is unacceptable with almost ten years of combat experience within the current force. Doctrine should also formalize the acquired experience in Iraq and Afghanistan that may have wider application. One doctrinal field manual is insufficient for light and Stryker infantry units and mechanized units.
Training should incorporate strategies used in current operations. Experience shows that some manner of light/heavy task organization is likely, and training should reflect that reality.

Defense policy analyst Stephen Biddle writes of how important force employment is to victory in modern battle. Yet, defense planners and policy makers tend to overlook force employment and look to technology or new operational concepts for future battlefield victories. Technology continues to advance and evolve at ever-increasing rates, resulting in a much more rapid diffusion of its powers to potential enemies. This constant change limits U.S. ability to rely on a technological advantage against conventional or irregular forces. In addition, new operational concepts are rarely new or revolutionary, and trying to foresee the next revolution in military affairs risks leaving the Army to fight as it did in the previous war or to recreate itself based on fundamentally flawed assumptions.

**Transition within the Army**

According to Loren Thompson of the Lexington Institute, the Army is preparing for war against an irregular force that does not field formations like those “from the era of industrial warfare.” The recent conversion of two heavy brigade combat teams (BCTs) to Stryker BCTs makes it clear that the Army is moving toward a lighter-weight, infantry-centric force in the belief that it has less need for the firepower, protection, and shock effect that armor brings to a fight. This belief is partly due to the slow strategic mobility of heavy forces and the relatively low numbers of dismounted Soldiers in heavy BCTs. It is difficult to argue against more infantry within our formations, but beyond the obviously greater need for infantry, the Army should ask what role armored and mechanized forces could play in the future.

How can we most effectively employ those forces? The answer lies within force employment—how to task organize those armored and mechanized forces and assign their tactical tasks and supporting relationships. Armored and mechanized forces may be able to play a significant role across the spectrum of warfare, including in irregular warfare.

A forthcoming Army report that considers the future security environment envisions the Army operating in or near population centers, which places a premium on close-quarter survivability and tactical mobility. Light and medium forces are vulnerable against modern antitank weapons and even the outdated armor found throughout the developing world. A mix of forces that includes heavy forces may provide a significant advantage.

A 2008 RAND study of medium-armored forces like the Stryker BCTs found those forces to have four clear advantages over heavy forces—strategic mobility, higher road speed, a smaller logistical footprint, and greater trafficability in areas with an immature infrastructure. However, they present a commensurate loss of firepower, protection, and cross-country mobility that requires detailed strategic planning, intelligence, and supporting arms to compensate for.

It is clear from the study that the Army is better off with a mix of force types that complement each other and help it remain prepared for both conventional and irregular warfare. Some worry that Army transformation is coming at the expense of armored and mechanized warfare. One of the takeaways of the RAND study is that armor, both medium and heavy, has historically been very useful in irregular warfare. The method of employment is what has been decisive. In the era of persistent conflict, Army forces conduct security missions and large offensive operations across substantial areas. Many counterinsurgent and stability missions and operations are tactically defensive in nature, but U.S. land forces still need to prepare to conduct classic conventional operations against threat forces that field armor or advanced antitank systems. Eliminating too many of our heavy BCTs may increase our vulnerability to these threat forces.

The Israelis discovered this lesson the hard way in Lebanon in 2006. Up to 40 percent of Israeli Defense Force (IDF) casualties, including dismounted infantry, were due to modern antitank systems. This led the IDF to reframe its doctrine and training for maneuver warfare, armored weapon systems, and conventional combat preparation. These changes were evident during the 2008 war against Hamas in Gaza. While irregular warfare is a likely part of the Army’s future, it would be unwise to assume that conflicts like counterinsurgencies will be its exclusive bill of fare. The Army may want to maintain a significant heavy force within the active component.
Soldiers and marines in mechanized formations have proven their ability to conduct counterinsurgency and irregular warfare successfully since 2003. Many of those troops have published their experiences in numerous periodicals. A sampling of their writings provides some insights in considering armor for irregular warfare.

First, mechanized forces clearly have different tactical applications than light and Stryker forces. Second, those forces are highly adaptable and are quite capable of overcoming their structural limitations. Finally, the determinant of success or failure seems to be the presence of creative, adaptive leaders and training. Modifications to structure and training may be the most effective way for heavy armor to remain relevant in force planning for a future of irregular warfare.

The current wars have reminded many of us of the infantryman’s importance in any conflict. Infantrymen are central to the success of mechanized forces in irregular warfare. Mechanized infantrymen have mobility, firepower, and the ability to clear complex terrain with their organic firepower in overwatch.

There is some question as to the proper ratio of heavy forces to light and Stryker forces as the Army rebalances its structure for the current operating environment. The risk for the Army and the United States is that the rebalancing results in fewer mechanized forces than necessary to respond adequately to unforeseen threats. Future threats to the United States may have greater warfighting capabilities, and we may sorely miss the mobility and firepower of mechanized forces if the Army’s rebalance leans too far away from them. Nonstate organizations like Hezbollah have arguably demonstrated military capability greater than that of enemy forces in Iraq and Afghanistan, and mechanized forces are well suited to counter that capability. This nonstate or hybrid threat is one for which Israel was not fully prepared when it fought Hezbollah in 2006. There is some concern, even within the Israeli government, that the IDF had been lulled into a false sense that there was no longer a conventional military threat to Israel and that, in the future, Israeli security concerns would center around irregular warfare with the Israeli Air Force able to defeat conventional threats. This reduced the need for conventional-style maneuver or firepower. The Israelis looked to air power as the answer.

The U.S. Army may be making a similar mistake—establishing a need for ground combat power for irregular warfare with only limited capability against more conventional threats from irregular forces. The IDF’s performance in Gaza in 2009 showed that they had learned these lessons and made changes to better fight the hybrid threat.

Even if the United States were to focus exclusively on irregular warfare, mechanized forces can play a decisive role. Most current literature on irregular warfare focuses on the early stages of insurgency, not the latter stages or other military operations in which conventional forces play a decisive role.

A look at the literature on insurgency suggests that the irregular force must become more conventional if it is to achieve its political and military objectives. Insurgency is offensive tactically, but defensive strategically, which is not decisive.

According to Mao Tse-Tung, there are three stages to an insurgency: strategic defensive, strategic stalemate, and strategic counteroffensive. In the defensive phase, the insurgent seeks to gain support from the civilian population using subversion and coercion. In a strategic stalemate, insurgent forces have achieved some level of parity with government forces as well as some measure of popular support. Insurgent forces may also provide services to the population in an effort to subvert the government. In the strategic counteroffensive phase, insurgent forces are stronger than the government and transition from guerrilla warfare to more conventional high-tempo warfare. The insurgencies in Algeria and Vietnam were examples of such high-tempo warfare, as were insurgencies of Hezbollah in Lebanon and the Jaysh Al-Mahdi in southern Iraq. High-tempo counterinsurgency forces may be decisive in neutralizing insurgents and forcing a retrograde back to the strategic defensive.

**Modifications to structure and training may be the most effective way for heavy armor to remain relevant...**
The Utility of Armor

Armored and mechanized forces have proven their worth in irregular warfare, but this fact seems to be lost on many analysts of future forces. There are numerous examples of mechanized forces being decisive in conventional-style irregular warfare and counterinsurgency and stability operations. Armored forces led assaults through the city of Fallujah during the November 2004 battle to reclaim the city from entrenched terrorists. During the Tet Offensive in Vietnam, conventional forces equipped with armor played major roles in the Battle of Hue and several battles around Saigon. Armored and mechanized forces were instrumental in defeating enemy forces in all types of terrain. The experiences of combat in Iraq have also shown the utility of armored and mechanized forces in combat against irregular forces when the operations tempo increased and they defended terrain or otherwise sought decisive engagement with U.S. forces. For example, during the Battle of Fallujah, U.S. forces used armor effectively in assault and support roles against insurgent forces who had chosen to stand and fight. The employment of armor in such a non-traditional manner may have contributed to the relatively low casualty rate for U.S. forces in the battle, as well as to the high tempo of the advance and the short duration of the fight. Irregular forces will, at some point, attempt to fight regular forces in a more conventional manner to achieve objectives.

Operation Iraqi Freedom provides many contemporary examples of successful employment of armored and mechanized forces in irregular warfare. The 3rd Armored Cavalry Regiment’s successful counterinsurgency operations in and around Tal Afar, Iraq, are one example. Those of the 1st BCT, 1st Armored Division, in Ramadi, Iraq, are another. The 3rd Armored Cavalry Regiment is a heavy cavalry regiment designed to conduct reconnaissance, security, and economy of force operations for a corps commander. At its heart are three ground cavalry squadrons of M3 Bradley Fighting Vehicle scout platoons and M1 tank platoons. In comparison to infantry brigades or even other heavy brigades, the regiment has fewer Soldiers available to conduct dismounted operations while still maintaining full mounted...
capabilities. Its deployment to Tal Afar began with a kinetic operation to gain a foothold in the city and to collect intelligence. The regiment’s heavy force structure was beneficial in the early kinetic operations. The 3rd Armored Cavalry Regiment was favorably asymmetric against most irregular forces in most areas. In areas that restricted the movement of armored vehicles, the regiment used a combination of Iraqi Security Forces and dismounted U.S. forces to great effect. Although it was task-organized with an airborne infantry battalion from the 82nd Airborne Division, most of the force was mechanized. The key to success was leadership and intellectual agility. Leaders had to understand the situation beyond its tactical aspects and employ available forces in the most effective way to take advantage of capabilities and mitigate limitations through adaptive force employment.

Influenced by 3rd Armored Cavalry Regiment’s success, 1st BCT, 1st Armored Division (1/1AD), conducted a similar operation in Ramadi, Iraq. While the operation focused on the civilian population, the brigade was in regular enemy contact. The 1st BCT was successful in a manpower-intensive counterinsurgency strategy while simultaneously fighting irregular forces. The brigade used its armored vehicles and crews to operate combat outposts throughout the city and to conduct route clearance operations in support of those outposts. Its use of armored forces is an example of their utility in irregular warfare; the onus is on the employment of those forces, not the forces themselves.

Armored and mechanized forces have done much of the fighting in Iraq in various configurations. At times, they have been standard mechanized formations, motorized without their armored vehicles, and even dismounted, but these variations in organization demonstrate the flexibility of the formations and the adaptability of their leaders. If the Army has both the right organizations and adaptive leaders, armor can still play an important role in irregular warfare.

**Armor Below the Brigade**

Much of the focus in recent years has been on the Army’s shift to becoming a brigade-centric organization. However, what may be real progress in Army force employment from a doctrinal standpoint is the deployment of smaller armor packages to operational theaters. This is not a new concept, even within the Army, but the idea does not get the same doctrinal or operational treatment elsewhere. There is clearly a role for armored and mechanized forces in irregular warfare because of their inherent capabilities. As the Army looks to reduce the amount of armor it employs, we risk losing or lessening a capability that most irregular forces cannot match. We risk losing a form of asymmetry. The U.S. Marine Corps and foreign services have acknowledged the value of armor and focused on its employment. When the Marine Corps reorganized Marine Expeditionary Units (MEUs), it decided to maintain an organic armored presence within the organization, with Colonel Gregg Olson, the 11th MEU commander, going so far as to say that he is a “firm believer that there’s plenty of problems that can be solved with an M1A1 battle tank.”

The smallest Marine Air-Ground Task Force is the Marine Expeditionary Unit, which contains a ground combat element built around a reinforced infantry battalion that typically includes an M1 tank platoon, a light armored vehicle platoon, and an amphibious assault vehicle company. Obviously the Marine Corps, a light infantry fighting force, values having an armor capability available for most operations and seeks to maintain and upgrade this capability. As the United States prepares for more Iraq and Afghanistan scenarios and operations in failed or failing states, the Marine Corps continues to preserve an armor capability, even deploying U.S. tanks to parts of Afghanistan.

The differences between the employment of armor and employment of limited mechanized forces may be useful to consider. With only three tank battalions and seven mechanized battalions to support 36 infantry battalions, Marine Corps armored and mechanized forces typically deploy...
in much smaller support packages. For example, marine tank platoons deploy with embarking MEUs, and the Marine Corps doctrinally employs tanks at the section level in support of infantry companies in a direct-fire support role. While the Army has some similar experience, Marine Corps doctrine and training specifically address the employment considerations and command relationships unique to such a task organization. Stryker BCTs have similarly employed the Stryker Mobile Gun System in support of infantry, but, with some exceptions, most of the Army does not conduct operations in a comparable manner. One of the key exceptions is the deployment of the reinforced company-sized units that prepare to deploy in support of the airborne forces.

The most recent example of such a use of armored and mechanized forces is Operation Airborne Dragon. On 7 April 2003, U.S. Army, Europe, deployed Task Force 1-63 Armor in support of the 173d Airborne Brigade to support the opening of a northern front during the invasion of Iraq. Task Force 1-63 contained the battalion headquarters, a tank company, a mechanized infantry company, and combat support and combat service support elements. The two maneuver companies supported a full airborne brigade during this early phase of the war. Employing armor in such situations may be more likely in the future. The introduction of heavy forces was a clear escalation, and one for which the Iraqi forces in the north had no answers. This was a form of asymmetric warfare, and it provided a marked advantage for both the 173rd Airborne and the special operations forces that Task Force 1-63 supported. The immediate ready task force that deployed by air is not a new concept for the Army, but it still lacks doctrinal support. The preparation, deployment, employment, and sustainment of Task Force 1-63 posed unique challenges for the Army, yet the use of a small, mechanized task force in
support of light forces was successful. We should codify lessons learned in this operation and in similar deployments. While irregular warfare may not see large armored forces sweeping across vast swaths of land, the use of those armored forces may still be beneficial.

The Canadian Experience

Canada is one of the main U.S. allies in Afghanistan. Its forces operate primarily in Regional Command East, which includes Kandahar, one of the most volatile areas in Afghanistan. Because of the tactics the Taliban used against Canadian forces, the Canadians chose to use some armored forces in Afghanistan, specifically tanks and engineers. While there were clearly challenges in deploying armor to Afghanistan, there were some valid lessons to learn for future force employment even in this restrictive terrain.

Force employment and the tactical tasks the Canadian armored troops received were outside published doctrine. Training on some of these non-doctrinal tasks may help to make them more standard and prepare our forces to better integrate all elements of combat power.

To integrate armor more closely with light infantry, Canadian forces task organized their armor down to the platoon and section level. This is similar to Marine Corps methods of armor employment. Employment of mechanized forces in Afghanistan required a somewhat unorthodox method of command and control, with the dismounted and mounted leaders handing over control for different phases of combat operations. Battle handover can be one of the more complex tactical tasks. Mechanized and armored units also task organize at the same levels, but this, too, falls outside published doctrine. Doctrine for mechanized forces should include task organization below the platoon level, especially in an irregular environment.

There were other notable findings of the Canadian experiment with armor in Afghanistan. The Canadian forces discovered that in Afghanistan, their tank plows and rollers were effective in route clearance operations against improvised explosive devices (IEDs). These implements were also effective in hasty and deliberate minefield breaches, as well as breakthroughs in complex terrain. The United States will likely never see a battlefield without some form of IEDs, and even light forces usually require some logistical support that must travel along vulnerable routes. Route reconnaissance and security may be a role for which mechanized forces are well suited.

There is a psychological value to the employment of armor as well, even in the developing world and among irregular forces fielding obsolete armor. The Canadians found that armor led to a greater resolve among soldiers, and they found that the presence of increased combat power reduced the kinetics of their operations.

Forces must employ armor in combined arms teams to be successful, but there is clearly a place for armor in light infantry-based combined arms teams. Mirroring findings in the U.S. Army, the Canadians found that their individual training for armor crewmembers needed to focus on basic skills, including physical fitness, marksmanship, crew-level tasks, and first aid. These basics are necessary regardless of the conflict or the terrain.

Finally, in open areas of Afghanistan, like southern Afghanistan, Taliban forces tended not to engage armored and mechanized Canadian forces. This is
likely attributable to the extended range of the Leopard C2 tanks they deployed.\textsuperscript{31} Deploying armor shows a resolve that few weapon systems can match.

However, there are limitations to the utility and effectiveness of armored and mechanized forces in places such as Afghanistan.\textsuperscript{32} There are vast areas where the terrain is simply too restrictive, the logistical burden too heavy, and risk of collateral damage too great in comparison to small arms. Tactical and strategic situations will often dictate that the benefits—greater mobility in open areas, survivability, firepower, and psychological influence—outweigh the limitations in using such forces.

The Canadian experiment with armor in Afghanistan is a reminder that force employment—the way a commander uses his available troops—is the decisive factor in war. U.S. military planners should consider innovative ways to use all three types of Army BCTs in irregular war and develop doctrine to prevent institutional amnesia once the current wars end. The Marine Corps deployment of M1A1 tanks to Afghanistan may be partially in response to the withdrawal of Canadian and Dutch armor, but these countries had a fair amount of success with tanks in the same region. The added benefit that the Canadians and Dutch did not have were crews and leaders who had experience with armored and mechanized forces in irregular warfare. U.S. leaders, staffs, and crews can call upon a trove of lessons learned and intuition gained from their combat and counterinsurgency experiences over the last seven years in Iraq. While the terrain, civilian, and logistical landscapes are different, the principles are the same. The experience, adaptability, and innovation of U.S. forces may lead to a much more positive outcome.

Conclusion

Armored and mechanized forces have shown their effectiveness in built-up areas in numerous engagements in Iraq and have exhibited a great deal of utility in other operations short of war. The key determinant to their effectiveness in irregular warfare is force employment—how we use them, not necessarily where.

As the Army studies further changes to its force structure, defense planners should reconsider the value they assign to heavy BCTs. Tactical maneuver and mobility are critical to success in modern warfare.\textsuperscript{33} The heavy BCT, when employed with competence, innovation, and a clear understanding of capabilities and limitations, provides a marked advantage.

In modern warfare, techniques of cover and concealment, tactical combined arms maneuver, and small-unit initiative reduce vulnerability.\textsuperscript{34} The Army should develop doctrine for mechanized forces that addresses these techniques and other considerations in irregular war. Any transition from conventional combat to irregular warfare requires stability and reconstruction after U.S. forces have achieved their objectives.\textsuperscript{35}

Current Army doctrine, while still evolving, does not adequately address the role of armored and mechanized forces in irregular warfare. Also noteworthy is the apparent decline in the influence of armor in favor of speed and precision. The decline of the role of mechanized forces may be due to the belief that the future will consist of counterinsurgencies and police actions. Mechanized forces may not, by themselves, be the ideal type of forces to conduct irregular warfare, but when used as a complement to lighter forces they may bring a unique capability to the battlefield for which an enemy force must account. When integrated with dedicated counterinsurgent forces, mechanized forces can provide timely and critical direct fire support and support security operations, and complicate the calculus for the enemy.

As the Army redesigns to better prepare for the future, it may want to consider the forces available and the uses to which it employs them. Even if the future does present a new generation

\textit{...force employment—the way a commander uses his available troops—is the decisive factor in war.}
of counterinsurgencies and stability operations, mechanized forces may be ideal for economy of force operations. Mechanized forces must be prepared individually, collectively, and doctrinally regardless of the situation or terrain in which they may find themselves. Creative and adaptive leaders have been highly successful using mechanized forces in Iraq and Afghanistan, where force employment is decisive.

As the Army reorganizes, brigades are becoming lighter. In today’s Joint environment, questions logically arise: If the Army chooses to eschew most of its armored and mechanized capabilities in favor of a lighter posture, what will it use to fill the resulting void? What will make the Army unique within the Joint framework toward which the U.S. military marches? As technology proliferates and diffuses, what will provide an asymmetric advantage in the future?

NOTES
3. Ibid.
5. Ibid., xvi.
8. Ibid.
10. Since 2003, the Army & Cavalry Journal has published many articles that specifically discuss tactics, techniques, and procedures that mounted forces have used primarily in Iraq. Other U.S. government-sponsored publications have published similar articles.
15. Gott, 105-106.
17. Ricks, 61-72.
27. Ibid., 8.
28. Ibid., 9, 20.
29. Ibid., 11.
30. Ibid., 15.
31. Ibid., 19.
32. Ibid., 21.
34. Ibid., 5.