

Life After Operational Maneuver

(a 12-step program)

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History and Heresy

In the 82 years since the invention of a practical tank, the sum of its use in a conventional situation consisted of two years in the First World War, seven in the second, and probably four additional years in places such as India, Korea, and various Middle East locales. This is a refrain familiar to the armored community. Yet what is rarely pointed out in counter-arguments are the accounts of when and how armor was used in ways planners did not anticipate.

The service of armored vehicles in the remaining 69 years includes an almost unbroken string of engagements in low intensity conflicts or employment in unconventional roles, beginning with the British in Palestine and continuing through the American involvement in Somalia. Combatants in these situations almost invariably lacked a thorough intellectual foundation for conducting an unconventional war. The majority of commanders sought to employ conventional doctrine on armored operations, but combat experience often produced an improvised doctrine separate from established thought. Because of their improvised and local nature, these decision-making guides rarely found their way into broad circulation among conventionally-minded armies.

Reading accounts of participants in armored, unconventional battles reveals similar local operating procedures which soldiers innovated to cope with unexpected situations. To avoid falling into this pitfall of unpreparedness, the United States Armored Force must plan changes in organization, equipment, and doctrine which address the dichotomy between the wars we are planning for and the wars we are likely to get. Specifically, the Army should consider a force structure that assigns tanks and armored vehicles directly to the light infantry in a supporting role across the Army. The concepts behind this historically-based recommendation ought to influence all future force structure modifications, such as the creation of the Strike Force. This recommendation would likely be most effective if accomplished at the brigade level (for the infantry), perhaps with an armor company assigned to each light infantry brigade.

The Road Behind Us

The tank was born of the need to provide mobility, firepower, and protection on the battlefield. Initially this mission was viewed entirely through the lens of infantry support. During the years between WWI and WWII, this vision changed, as tanks began to assume the cavalry role. Based upon experience in World War II, most armies viewed armored vehicles as a means to restore operational maneuver to the conventional battlefield. As a result, tactical and operational mobility became the most



important attribute of armored vehicle design. Since many unconventional conflicts occurred in restricted terrain that limited the mobility of mechanized forces, military thinkers often dismissed armored vehicles as irrelevant to that type of warfare. But the historical record shows that tanks and tank-like vehicles were often used in these roles, and their employment often took on a form greatly changed from the conventional practice.

Current discussions of tank operations show a particular trend which developed after World War I, but the intellectual consensus on the role of tanks in warfare was the original motivation for their creation — infantry escort and support. Richard M. Ogorkiewicz's *Armor: A History of Mechanized Forces* describes them as, "barbed wire crushers and machine-gun destroyers.... a useful auxiliary."¹ This role as conventional infantry support continued throughout the inter-war period. The British publication *Tank and Armoured Car Training* of 1927 describes the tank as "especially suitable for facilitating, by fire action, the forward movement of other arms."² Simultaneously, a new, and eventually dominant, viewpoint emerged. Armies began to think of employing tanks in the old cavalry role, "reconnaissance, screening, exploitation, pursuit, and raiding operations... [necessitating] a more dynamic use of the tank than the simple close support role."³

Although methods and tactics varied greatly, to large degree most participants in World War II began with armored doctrine that reflected this divergence of mission between the infantry and cavalry branches.⁴ The French offer, perhaps, the most studied lesson in armored tactics. Despite their early development of armor during the First World War, they did not follow the same design or doctrinal path as did the Soviets, British, or Germans between the wars. From the outset, the majority of French tanks were designed solely for infantry support.

This philosophy affected the design of French tanks. The French developed some of the heaviest tanks ever seen. The Char 2-C heavy tank weighed in excess of 70 tons with a crew

of between 13-19 personnel. For firepower, one experimental model mounted a 155mm main gun.⁵ Such huge tanks could travel only 3-6 miles per hour, a sufficient speed to accompany infantry moving at an absolute top speed of five miles per hour, but inadequate for rapid offensive warfare. Additionally, French tank designs developed in the interwar years often had a one-man turret. Even their most successful designs, the Char B-1 heavy tank and the Char Somua S-35, with three- and four-man crews, retained this single-man, cast-iron turret design.

The result of this doctrine and training was tanks with good armor, decent automotive power and sufficient weaponry, but tanks unsuited to the tempo of mobile warfare.⁶ In simple terms, a tank with a one-man turret is at a severe tactical disadvantage against a tank with a two-man turret. The extensive study and myth-making which surrounded the subsequent French defeat led many members of the armor community to conclude that mobility and not protection was the dominant trait needed in an armored vehicle. Indeed, armies who trained to conduct infantry support were doomed to defeat from the outset. By the war's end, a loose consensus emerged on the employment of armor which holds even in the present day. Generals should employ tanks, in mass, on the operational level to exploit weaknesses in the enemy's initial positions and rear areas. Works by B.H. Liddell Hart, Heinz Guderian, and various Soviet theorists all pointed in this direction, even if they disagreed on methods.⁷ The current-day western military thought on the topic of armored force employment is stated nowhere more clearly than in civilian military analyst James Dunnigan's 1993 edition of *How to Make War*. According to Dunnigan, "The concentrated combat power of tanks makes them alone of all the combat arms, capable of forcing a decision quickly and decisively."⁸

Yet in the aftermath of World War II there was a long series of wars which saw armor employed around the globe, often in violation of this consensus. For all intents and purposes, neither the French, Israelis, British, nor the Soviets possessed a premeditated theory for employing armor in a limited war against an unconventional foe prior to their respective interventions in Indochina, Lebanon, Northern Ireland, or Afghanistan. Examining the experiences of these other nations, as well as our own historic record, will validate this basic premise.

As seen earlier, during the years between World War I and II, the British Army began following two paths in developing their designs for new armored vehicles, one of traditional infantry support, but also a newer role of fulfilling the cavalry mission. But they remained wedded to the idea that tanks were for use solely in conventional warfare scenarios. Limited British experience in policing areas such as the Palestinian Mandate with armored cars was eclipsed by the campaign experience of the Second World War.

As a result, the British did not foresee the potential of tanks in policing the rebellious provinces of Northern Ireland. Yet when faced with increased violence in the province during the 1970s, the British did eventually deploy armored vehicles there. Although tracks proved less than ideal for the narrow Irish streets, Michael Dewar's *The British Army in Northern Ireland* contains descriptions of at least four different types of armored vehicle that served with the British troops there up to 1985. These vehicles ranged from armored Land Rovers to Saladin armored cars.⁹ Missions for units with armored vehicles included securing roadways and close support of dismounted patrols. The first-person account, *Contact*, emphasizes the role "pigs" (nickname for the standard APC) played in force protection.¹⁰ As in other

cases, doctrine was developed on the spot to meet local conditions.

In Afghanistan, Soviet forces chose to employ tanks and other fighting vehicles from the very start. "Armor in Low Intensity Conflict," a study published at the U.S. Army's Command and General Staff College, concludes that the Soviet forces viewed the counter-insurgency campaign in that country as merely an extension of their conventional mountain warfare doctrine, which included heavy armor.¹¹ After indifferent results or outright defeats resulted from attempts to employ armored units in maneuver warfare against the Afghani guerrillas, the Soviets began to reorganize their forces locally. *The Bear Went Over the Mountain*, a translation of Soviet staff studies of the Afghan War, reflects the increasing dispersion of Red Army armored units to support outposts and convoys. Additionally, the Soviets began to organize special groupings of armored vehicles to provide close support to advancing infantry.¹² *Armor of the Afghanistan War* points out that Soviet airborne troops rapidly exchanged their light BMD personnel carriers for more durable BMPs.¹³ What emerged from the Soviet experience there, at least in theory, was an appreciation by the Red Army that operations in restricted terrain, which rely primarily upon the infantry for execution, require a re-thinking of the concept of the purpose of the armored vehicle.¹⁴

In similar fashion, the Israeli involvement in a prolonged unconventional war in Lebanon began as a conventional operation and is well documented as such in *Operation Peace for Galilee* by Richard Gabriel.¹⁵ After the Israeli Defense Force crushed organized conventional resistance, the war entered a prolonged period of unconventional attrition warfare. Lieutenant Colonel David Eshel's article in *ARMOR* is particularly useful in assessing the changes wrought on the Israeli armored force by unconventional opponents.¹⁶ Tanks were deployed in "a series of strongpoints located widely apart," as well as "maintain [-ing] open supply routes to the strongpoints."¹⁷ The article goes on to detail a staggering array of upgrades to armored vehicles to make them less vulnerable to guided missile ambushes, a weakness enhanced by Lebanon's rugged terrain. Again and again, the historic record displays the same tendency to use armored vehicles in defensive and supporting roles.

During French combat operations in Indochina, terrain and the nature of the combat dictated that armored forces would not operate in large formations against conventional forces similarly equipped. Instead, as was so well illustrated by the fate of the now famous *Groupment Mobile 100*,¹⁸ they were to operate as fire brigades at best, rushing from location to location where they would be employed in infantry support operations. At worst, they would serve as near-static defenses in strongpoints across the landscape in contention. Yet the French, due to the lessons learned from World War II, remained wedded to the idea that armored forces must be utilized in highly mobile reaction forces. Having abandoned the idea of armor designed for infantry support, they were extremely loath to return to that intellectual terrain. As a result, light American supplied M-24s, half-tracks, and 2-1/2-ton trucks proved highly vulnerable to Vietnamese mines and RPGs because they were designed as scouting and transport vehicles and not stand up firepower.

All of this leads us to an examination of the American military experience. Here the record is relatively clear. Following World War I, the Tank Corps was disbanded, and tanks were subordinated to the infantry. Tanks were, officially at least, solely for the support of the infantry. Beginning in the late 1920s, ideas started to circulate that perhaps there was a potential for mobile

warfare in the budding technology as well. For the sake of argument, let us refer to this period as “the bad old days.”

Following the 1940 creation of the Armored Force, and its successor, the Armor branch, the Army followed the path of so many other nations. Armor was designed for and conceptually assigned the mission of mobile warfare in conventional warfare.¹⁹ Planners focused solely upon tank-heavy or tank-pure operations at the tactical and operational levels. This despite the fact that during the war itself the actual majority of all tank battalions that saw combat were not members of the 16 armored divisions but separate battalions operating in a habitual direct support role to the infantry divisions.²⁰

Thus, the American armored experience should appear this way:

- In World War I, tanks supported infantry only.
- In World War II, most tanks supported infantry.
- In Korea, American tanks came in very little contact with opposing armor — almost all tank combat operations were in support of the infantry.

Our Army’s deployment to Somalia once again highlighted the vulnerability of light and even lightly armored vehicles to mines and light anti-armor weapons. Simultaneously it demonstrated the need for armored forces in direct support of the infantry.

In Vietnam all tanks supported the infantry. American armored troops found their biggest threat to be the anti-tank mine and the light anti-armor rocket. The variety of ammunition available to the M-48’s 90mm gun proved to be a valuable asset in security and support missions remarkably similar to those performed nearly a decade later in Afghanistan. Despite this, by the time of American involvement in Vietnam, the Army was fully committed to the use of armor in primarily a tank-versus-tank role. General Donn A. Starry emphasized that Bernard Fall’s description of the fate of French mobile forces in *Street Without Joy* carried great influence in American circles.²¹ In addition, he noted that the U.S. Army enjoyed “a singular lack of doctrine for mounted combat in areas other than Europe and the deserts of Africa.”²² In many ways, despite the publication of local training circulars, it was not until the 1982 *Jungle Operations* manual that a comprehensive set of instructions for armored combat in restricted terrain appeared for Army-wide consumption.²³

A host of current military operations demonstrate the need to rethink our concepts of how armor should be organized and doctrinally employed. The American deployment to Panama in Operation Just Cause included an armor unit integral to the 82nd Airborne (3-73 AR). However, anticipated resistance dictated that planners add additional mechanized units in an ad-hoc manner from the 4th Infantry Division. Both the M551s and M113s utilized in the operation were needed in support of light infantry units in operations in urban terrain.

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Deployment to Haiti again featured hastily attached armored units (Bradley Fighting Vehicles) to the entry force, and although the IFOR deployment into Bosnia recognized the necessity of armored force in a support and stability operations mission, few of the crews there performed in a role for which most of their military training prepared them. Reflective of the missions which occurred in the past, the Bosnia deployment featured tanks and fighting vehicles deployed piecemeal in support of strongpoints, performing route security, and, should conflict have arisen, direct support of an infantry-dominated operation.

The Road Ahead

Of course, the Armor Force must be trained and prepared to fight and win a conventional conflict characterized by large scale operational maneuver. The authors are not advocating a return to the “bad old days” of infantry dominance of the armored force. Yet, the tactics and missions performed by armored units in areas other than the high intensity battlefield, often in restricted terrain, are fundamentally different, beyond mere revalidation of the importance of some missions such as Military Operations on Urban Terrain (MOUT). In an environment of long-duration occupation and relatively predictable operational patterns and tempos, high mobility simply means that the task force reaches the ambush site quicker. Instead, our focal points must become protection against mines and light, easy to acquire anti-tank weapons. That protection is most likely to come from walking infantrymen on the ground.

Tank crews must be trained, equipped, and organized to support operations restricted to the pace of the walking infantryman. Fortunately, the Armored Force is not hampered by the technological hurdles of the 1920s and 1930s. What we are lacking is a true linkage to what will in all probability be the real future: combined arms at the worm’s-eye level. To illustrate how far we have diverged from this mission, look no further than a few of the design flaws of the M1 family of vehicles, as seen from an infantryman’s perspective. The Abrams is both mobile and very well protected. Excellent for those of us inside the hull or turret, but it comes at a cost. No infantryman in his right mind is going to provide close dismounted escort to an M1 in a MOUT environment from the traditionally most effective location, directly behind the tank, for obvious thermal reasons. Nor are stopgap communications measures, such as hanging TA-1 and field phones off the side of the tank, a truly reliable replacement for the old “escort phone” that was once included on U.S. tanks. Another lesson handed down by past combat tankers was that having a wide variety of munitions available for the main gun proved beneficial. Yet we no longer have the WP, canister, or smoke shells of the past, three munitions crucial in close fighting with the infantry.

Simply put, our current tank reflects better than anything else how far we have diverged from any idea that we might again have to work with the infantry in close quarters. Work at the new Fort Knox MOUT site may well highlight these limitations and lend current validity to our historically based recommendations. Yet, there is a need for larger change in the organizational structure as well. Among other things, we must acknowledge

that infantry support does require specialized knowledge and training not developed on TT VIII. What we need is tankers who are well trained to support the infantry. The permanent attachment of a tank company directly to each light infantry brigade would standardize logistic arrangements and command procedures, greatly enhance the firepower of the brigade, and provide a critical force protection asset.

United States Army armored force doctrine and organization does not entirely reflect how our forces were actually employed over the course of the past 50 years. America's enemies identify casualties as a key center of gravity for our forces. Heavy armor provides the infantry with protection they need. As the French used to remind their troops in Vietnam, "Remember, the enemy is *not* fighting this war as per French Army regulations."²⁴

Notes

¹Richard M. Ogorkiewicz, *Armor: A History of Mechanized Forces* (New York: Praeger, 1960), 8.

²War Office, Great Britain, *Tank and Armoured Car Training* (London: H.M. Stationery Office, 1927), 16.

³Robert S. Cameron, "Armor Combat Development 1917-1945," *ARMOR* (September-October 1997), 14.

⁴All of the following feature some discussion of this debate over the role of armor: Cameron, 14-19; Robert H. Larson, *The British Army and the Theory of Armored Warfare, 1918-1940* (Newark: University of Delaware Press, 1984); Ogorkiewicz; A.J. Smithers, *A New Excaliber: The Development of the Tank 1909-1939* (London: Leo Cooper, 1986); Harold R. Winton, *To Change an Army* (Lawrence, KS: University Press of Kansas, 1988).

⁵Major John W. Leonard, "The Development of Tanks," *Infantry Journal* 27, No. 5 (1925), 486. This article was a survey of then current armor developments around the world. The model which Leonard identifies as having a 155mm gun mounted was the Char 2C-bis, of which only one was made. Additional information regarding French interwar armor is found in Mildred Gillie, *Forging the Thunderbolt: A History of the Development of Armor* (Harrisburg, PA: The Military Service Publishing Co., 1947), 19. Gillie also states that there was one French tank weighing 144 tons. The nomenclature of this tank is not recorded. The only substantiation to this claim I have found is a small note in the "Technical Services" portion of the *Infantry Journal* circa 1930 which makes the same claim.

⁶Christopher Foss, *Tanks and Fighting Vehicles*, (London: Salamander Books, 1977), 79. Foss makes this point repeatedly in a technical analysis of numerous French armored vehicles of the pre-war period. As a regular contributor to Jane's Defense series books, this analysis is probably based less on historical documentation than on modern ergonomic designs which Foss encounters in his work in modern armored vehicle analysis. However, his point would appear to be validated by both common sense and the empirical data collected by modern U.S. Army automated armored vehicle crew training such as the UCOFT as observed by the author. (Unit Conduct Of Fire Trainer) In UCOFT engagements, the crews of modern U.S. vehicles are forced to undergo simulated "degraded operations" and "commander only" engagements. The target kill/target presented ratio for these types of engagements are generally much lower than the kill ratio of the full crew even though the commander has a fully operational station to engage targets.

⁷B.H.Liddell Hart, *The Future of Infantry* (Harrisburg: Military Service Publishing Co., 1936). Heinz Guderian, *Panzer Leader* Trans. by Constantine Fitzgibbon, (New York: Dutton, 1952). John Milsom, *Russian Tanks, 1900-1970: The Complete Illustrated History of Soviet Armoured Theory and Design* (Harrisburg: Stackpole Books, 1970).

⁸James F. Dunnigan, *How to Make War* (New York: William Morrow and Co., 1993), 70.

⁹Michael Dewar, *The British Army in Northern Ireland* (London: Arms and Armour Press, 1985), 196-200.

¹⁰A.F.N. Clarke, *Contact* (New York, Schocken Books, 1984), 45-71.

¹¹Michael R. Matheny, "Armor in Low Intensity Conflict: What is the Best Doctrine for Counterinsurgency?" School of Advanced Military Studies (Fort Belvoir: Defense Technical Information Center, 1987), 23-26.

¹²Lester Grau, ed. *The Bear Went Over the Mountain: Soviet Combat Tactics in Afghanistan* (Portland: Frank Cass, 1998).

¹³Steven Zaloga, Wojciech Luczak, and Barry Beldam, *Armor of the Afghanistan War* (Hong Kong: Concord Publications, 1992), 9-12.

¹⁴"At least in theory" because, as evidenced by Russian operations in the breakaway province of Chechnya, the Russians may have forgotten this lesson in the intervening years.

¹⁵Richard A. Gabriel, *Operation Peace for Galilee* (New York: Hill and Wang, 1984).

¹⁶David Eshel, "Armored Anti-Guerrilla Combat in South Lebanon." *ARMOR* (July-August 1997), 26-29.

¹⁷*Ibid.*, 26.

¹⁸Bernard B. Fall, *Street Without Joy* (Harrisburg: Stackpole Books, 1961), 185-250. General Westmoreland notes in his memoirs that he kept a copy of this book on his bedstand at night. G.M. 100 was a combined arms task force decimated in the Central Highlands of Vietnam. Interestingly enough, in his revisions, Fall suggests that the performance of the armor platoon was perhaps the most effective unit employed (p. 356).

¹⁹There was one minor exception to this modern consensus, the United States Marines maintained an armored force whose purpose resided solely in the province of a supporting arm. *Progress and Purpose*, a Marine Corps developmental history, attributes this tendency to the difficulty in landing large numbers of tanks in amphibious operations. Discussion of the role armored forces should play in any unconventional situation was largely non-existent. The U.S. Marine Corps made a small attempt in their *Small Wars Manual* of 1940. The extent of this commentary was merely to state that armored vehicles might have a significant psychological value against an insurgent and reduce casualties in the initial stage of an intervention.

²⁰Ultimately only around 20% of the tank rounds fired in combat were of the armor-piercing variety and even the single-purpose tracked tank destroyers found use mainly as assault guns.

²¹Donn A. Starry, *Mounted Combat in Vietnam*. (Washington: U.S. Government Printing Office, 1989), 4-5.

²²*Ibid.*, 7.

²³United States Department of the Army *FM 90-5: Jungle Operations* (Washington: U.S. Government Printing Office, 1982), chap. 6, 5-14.

²⁴Fall, 381.

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