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CULMINATING POINTS

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The principles and concepts expounded by Carl von Clausewitz have received much attention in recent years. They are used often in today's doctrine and in the education and training of soldiers. The author examines the concept of "culminating points," using past battles and campaigns to describe the concept.

Throughout history, some concepts have lain dormant for more than a century between their formulation and the time they gained acceptance as doctrine within the intended profession. The concept of culminating points is one of them. Clausewitz formulated the idea in his *On War*, published posthumously in 1832. It was recognized 150 years later as a "key concept of operational design" in the current US Army Field Manual (FM) 100-5, Operations.

When a concept takes that long to attain recognition, it is probably abstract and it is likely to be profound. A profound concept in the military profession is one that superintends the whole of tactics and the implements of war. Clausewitz's concept of culminating points is undeniably an abstraction. Whether it is equally profound remains to be seen, but a good case can be made that it is, and on a par with the principles of war.

FM 100-5 starts the discussion on culminating points in clear terms that immediately convey both the meaning and the significance of the concept.

"Unless it is strategically decisive, every offensive operation will sooner or later reach a point where the strength of the attacker no longer significantly exceeds that of the defender, and beyond which continued offensive operations therefore risk overextension, counterattack, and defeat. In operational theory, this point is called the culminating point. The art of attack at all levels is to achieve decisive objectives before the culminating point is reached. Conversely, the art of defense is to hasten the culmination of the attack, recognize its advent, and be prepared to go over to the offense when it arrives."
{1}

The manual next lists a number of reasons for this phenomenon, followed by examples. The reasons include insufficient logistic support, increasing vulnerability of lines of communication and losses sustained during the offensive before decisive battle begins. The discussion concludes:

"For his part, the defender must seek to bring the enemy attack to or past its culminating point before it reaches an operationally decisive objective. To do so, he must operate not only on the enemy force itself, but also on its sustainment system. The more

readily the defender can trade space for time without unacceptable operational or strategic loss, the easier this will be.

"Once operations begin, the attacking commander must sense when he has reached or is about to reach his culminating point, whether intended or not, and revert to the defense at a time and place of his own choosing. For his part, the defender must be alert to recognize when his opponent has become overextended and be prepared to pass over to the counteroffensive before the attacker is able to recover his strength."
{2}

A well written commentary of this caliber needs no further explanation per se, but three aspects beg emphasis. First, the culminating point for the defending and the attacking commanders is one and the same, although it is not a static point (or line) on the ground. The defender tries to move the point farther away from the attacker (toward himself) in order to wear down the latter's effective strength; whereas the attacker tries to prevent that delay or shift, or failing to do so, he should break off an attack when it is obvious he has passed the point before engaging in decisive battle. It is a tug of war of sorts, with the knot in the rope analogous to the culminating point.

Second, FM 100-5 implies the offensive may continue after the culminating point is reached, albeit subject to defeat. Clausewitz was more pessimistic. He implied that once the culminating point was passed, the chance of victory was foreclosed unless the enemy yielded from fear without engaging in decisive combat. If the enemy chose to fight it out, he would prevail. Restated, when the attacker passes the culminating point, further progress is merely forward motion on the road to perdition. Clausewitz wrote:

"Once the mind is set on a certain course toward its goal . . . it may easily happen that arguments which would compel one man to stop, and justify another in acting, will not easily be fully appreciated. Meanwhile the action continues, and in the sweep of motion one crosses. . . the line of culmination, without knowing it . . . We believe that this demonstrates without inconsistency how an attacker can overshoot the point at which, if he stopped and assumed the defensive, there would still be a chance of success . . . It is therefore important to calculate this point correctly when planning the campaign. An attacker may otherwise take on more than he can manage and, as it were, get into debt; a defender must be able to recognize this error if the enemy commits it, and exploit it to the full . . . {3}

"This culminating point in victory is bound to recur in every future war in which the destruction of the enemy cannot be the military aim, and this will presumably be true of most wars. The natural goal of all campaign plans, therefore, is the turning point at which attack becomes defense. If one were to go beyond that point, it would not merely be a useless effort which could not add to success. It would in fact be a damaging one, which would lead to a reaction; and experience goes to show that such reactions usually have completely

disproportionate effects." {4}

Third, the culminating point can be a moot consideration. When the attacker has overwhelming strength and resolve, the point occurs only as an imaginary locus far behind the opponent's main battle lines. Conversely, when the attacker is hopelessly weak, the point coincides with the line of departure. During the 1987 Wimbledon tennis matches, Pam Shriver, having been thoroughly trounced in the semifinals, said afterward that the turning point, read culminating point, of the match occurred when she walked out onto the court.

With these aspects in mind, the dynamics of the culminating point concept explain the outcome of the most famous battle in American history, as a tactical encounter, as part of an operation, and within the context of a major war.

Gettysburg

The climactic time and place of the Battle of Gettysburg occurred during the early afternoon of 3 July 1863, and is said to have been the highwater mark of the Confederacy. The great cyclorama maintained near the battlefield depicts the drama on Cemetery Ridge in magnificent detail, but Cemetery Ridge did not mark the culminating point. That point was passed on the approach to the ridge. The ensuing battle was the foreclosure on the debt, to use Clausewitz's analogy, incurred by General Robert E. Lee when he ordered the attack. For as capable and distinguished a general as Lee was, he suffered a momentary lapse of judgment that day. He had ordered an attack uphill, across a wide open field held against an experienced, entrenched defender, fighting on his own soil, who had the advantage of interior lines, reinforcement from reserves without interdiction and the capable leadership of General George G. Meade.

Lieutenant General James Longstreet had recognized the futility of the plan of attack and had tried to dissuade Lee from pursuing it. {5} Lee persisted, but admitted later the same day, "All this has been my fault. It is I that have lost the fight." {6} He recognized, after the fact, he had ordered a decisive battle beyond the culminating point, and as such the Union decided it for him. Yet, this does not imply the culminating point functions like the law of gravity. On the contrary, an astute tactic can shift the point beyond the decisive place and time. Longstreet had recommended some form of tactical envelopment of the Union forces on Cemetery Ridge. Had Lee accepted his advice, the battle might have gone to Lee. But not the war.

In the larger perspective of Lee's operation, and indeed the entire war itself, the South arguably had passed the culminating point before Gettysburg. It was expending irreplaceable resources, while the North was able to replace its losses. Worse, the Confederacy was betting on the wrong horse. Bruce Catton put the case this way:

"Lee at Gettysburg was fighting against a man who never wore a uniform or fought a battle: the eminent Illinois civilian Abraham

Lincoln. The whole rationale of the Confederate offensive that summer. . . was the belief that the Northern government would crack under the strain, that it would take troops away from General Grant, lose confidence in final victory when it saw the Confederate troops in the Northern heartland, find the price of war too great to pay, and so consent at last to a final separation. None of this happened." {7}

Recall Clausewitz's prediction that the culminating point was bound to recur in any future war in which the destruction of the opponent's forces was not the objective. The South intended only a limited war, with the objective of securing recognition of the Confederacy. The North, by contrast, was intent on the absolute defeat of the South's ability to wage war. Since the North had the resources to prevail, and the South had neither the intention nor ability to destroy those resources, the culminating point of the Civil War was reached and passed long before Lee intruded into Pennsylvania.

Other Examples

The reader is strongly encouraged to review the examples of the culminating point described in FM 100-5, although the difference between the culminating point and the high water mark should be reiterated. For example, the manual states that German General Erwin Rommel's drive into Egypt culminated at El Alamein. {8} This is true, but paralleling Cemetery Ridge at Gettysburg, El Alamein was not the culminating point, per se. That point, from an operational perspective, occurred earlier when superiority of resources accrued to General Bernard Montgomery. Either Rommel failed to recognize the culminating point or recognizing it, passed it due to Adolf Hider's order to fight to the last man irrespective of the futility.

Another interesting application of the culminating point demonstrated itself at Gallipoli during World War I. The British national objective was naive, but the operational failure did not foreshadow national or Entente failure. The national objective had been to end the war early and decisively. This objective was translated into an operational objective to put the British fleet opposite Istanbul (then Constantinople). The theory was that Turkey would crumble politically at the sight of the fleet, withdraw from the Triple Alliance, join the Entente, and thus bring Kaiser Wilhelm to his knees. {9}

The operational objective, however, was within range of the possible, even if the anticipated national consequences were ludicrous. But this objective required passage of the Dardanelles. The strait was heavily mined at its narrowest part and was protected by Turkish forts out of range of effective naval bombardment. Precipitous as the risk was, sagacious tactics might have won the day. Instead, the British forces committed multiple mistakes, resulting in a protracted struggle and dismal failure. {10} In short, the passage of the tactical and operational culminating points coincided, whereas passage of the strategic culminating point occurred when the British forces left port,

or at the latest, as they sailed into the region.

That the failure to prevail in the operation did not result in national defeat is due to the fact the Entente had sufficient resources and resolve to pursue the war on the main, Western Front. Also, the distant failure gave Germany no particular advantage on that Western Front to exploit. Yet, it should be asked if the expenditure of force at Gallipoli reduced the Entente forces on the Western Front below the point where victory might have been attained much earlier and without US intervention some years later.

The loss of sufficient combat strength prior to decisive conflict in these examples, as elsewhere, ensues from many causes. Some were mentioned above. In more detail, unofficial doctrine holds that it takes a 3-1 strength ratio for an attacker to dislodge a defender. In some cases, determined defenders have held out against ratios of 10-to-1 or even higher; for example, the Pusan perimeter during the early months of the Korean conflict. Now if the attacker tends to sustain greater losses during an approach and if the uncertainties of war tend to work hardest against the side in motion, how much strength is required at the line of departure to ensure a 3-1, or possibly much higher, force ratio at the decisive times and places of battle? Moreover, because the defender usually can "trade space for time" in order to move himself to the beneficial side of the culminating point, the required initial force ratio can be much higher than estimated.

In short, the culminating point thesis gives literal meaning to the expression battle calculus. The figure illustrates this phenomenon in terms of the principles of war. If superior mass is dissipated prior to attaining the objective, the principle of the offensive, which means to retain the initiative, is foreclosed. The loss of initiative is tantamount to loss of the battle. The attacking commander has bought the farm, irrespective of delays in settlement. In this calculus, the position of the culminating point, given relatively fixed strengths of the attacker and defender, can be shifted to the right or the left by, respectively, a brilliant or inadequate maneuver. This shifting can be further enhanced, or retarded, by a similar application or misapplication of the other five principles, such as surprising the opponent before he has adequate time to react effectively. These enhancements have the effect of multiplying actual combat strength without additional cost. In a close contest, the difference between victory and defeat is often attributable to how well these "supporting" principles are applied.

(figure)

Operation of the Culminating Point. The principles of maneuver, unity of command, economy of force, surprise, security and simplicity serve as factors to advance or retard the culminating point with respect to the objective by changing the effective mass or strength of the attacker. If the strength is insufficient before decisive conflict, then the initiative is lost. The degree the

remaining principles of war are used raises or lowers the strength curve of the attacker, which raises or lowers the strength ratio curve, which thus shifts the culminating point.

The analysis also pertains to the operational and strategic levels of consideration, even though the principles of war are stated primarily in tactical terms. That is, culminating points operate at these higher levels, but the principles of war themselves take on different meanings. For example, at the operational level, the principle of mass evolves into a stress on sustainability of military strength. This may require a more discrete sequence of tactical objectives in lieu of fewer, larger battles.

A good example was the conduct of Admiral Raymond A. Spruance during World War II. Though he achieved solid results in the battles of Midway and the Philippine Sea, he declined to pursue the retreating Japanese forces on both occasions. {11} Initially criticized for these decisions, he knew that pursuit under the circumstances would have passed the tactical level culminating points, incurring casualties and damage incommensurate with any possible tactical gains, and would have weakened the US ability to prevail at the operational level. Admiral William F. Halsey Jr., in contrast to Spruance, relished a good fight at almost any cost. The results were that he often failed; that during the Battle of Leyte Gulf, he left a major amphibious operation unprotected (and as a consequence almost destroyed); and that his fleets twice suffered unnecessary damage from violent storms. He narrowly escaped being court martialed or at least relieved of command on two occasions. {12}

In sum, success of battle or war comes only when the attacker has sufficient clout to remain the superior force in spite of losses incurred before decisive engagement. For an operation, this means a sufficient number of tactical engagements must succeed to guarantee the operational commander will prevail in the theater. Warriors may elect to ignore this fine print; the calculus of battle, and of war, does not.

Even a cursory review of military history suggests that passage of the culminating point is a common occurrence, and if so, it is fair to ask why. At least four reasons exist, discussed in descending order of justifiability. The first reason includes justifiable losses at lower levels of command for the sake of success at higher levels, tactical bunts as it were. Calculated risks at the tactical level will occasionally meet defeat, but, collectively, can increase the overall efficiency of operations. The sacrifice of a forward unit can enable the main (but otherwise outnumbered) force to inflict decisive damage. The forward element of Stonewall Jackson's forces during the Shenandoah Valley Campaign in the Civil War sustained repeated mauling, but the operation was a brilliant, if local, success.

The second reason is the difficulty of perceiving the culminating point, particularly in pitched battles. This reason is further justified by the standard of conduct imposed on battlefield leaders. At

Gettysburg, Major General George E. Pickett, who led the Confederate attack up Cemetery Ridge, would have been branded a coward had he retreated before reaching the top, notwithstanding Longstreet had correctly foreseen the defeat. This reason, of course, is less justifiable at the higher levels of command, because commanders at these levels have more time and are expected to reflect on the course of an operation or war.

The third reason comprises mistaken notions of heroism. Unquestionably, heroism and courage are the prime virtues of the man in uniform. It is natural to admire great courage even in futile circumstances, a human attribute that raises the conduct of war to a sometimes undeserved level of merit. By way of example, a Japanese prosecutor, during World War II, obtained the conviction and death sentence of 10 Australian commandos (who had operated in nonmilitary clothing), but concluded:

"With such fine determination they infiltrated into the Japanese area. We do not hesitate to call them real heroes of a forlorn hope . . . The valorous spirit of these men reminds us of the daring enterprise of our heroes of the Naval Special Attack Corps. The respect . . . the Australian people showed to those heroes we must return to these heroes in our presence. When the deed is so heroic, its sublime spirit must be respected, and its success or failure becomes a secondary matter." {13}

Lieutenant Colonel (later Supreme Court Justice) Oliver Wendell Holmes Jr., a thrice wounded veteran of the Civil War, reminisced there is nothing more commendable than the "faith which leads a soldier to throw away his life in obedience to a blindly accepted duty, in a cause which he little understands, in a plan of campaign of which he has no notion, under tactics of which he does not see the use." {14} But courage is not something senior commanders should attempt to organize into brigades, light or heavy. The late General Bruce Clarke wrote in a classic essay that the commendable attributes of small unit battlefield leadership are not the basis for the controlled audacity and organizational skills required of senior commanders. {15}

This brings the discussion to the fourth reason, obsession and egotism, which in some cases may be a mistaken notion of heroism carried to an extreme. Though Clausewitz advised wars were a continuation of policy by other means, he devoted a substantial part of *On War* to the explanation of why nations ignored this precept and instead let wars run amuck. Chief among those reasons were "excessive emotionalism" and "greed for honor." {16} This is a shortcoming that can afflict the most prudent of soldiers. Colonel T.E. Lawrence, whose distinguished performance during World War I may be unparalleled and who was humble enough to decline the award of the Victorian Cross, later admitted:

"As time went by our need to fight for the ideal increased to an unquestioning possession, riding spur and rein over our doubts . . . It became a faith. We sold ourselves into its slavery, manacled ourselves together in its chain gang, bowed ourselves to serve its holiness with

all our good and ill content . . . By our own act we were drained of morality, of volition, of responsibility." {17}

B. H. Liddell Hart restated the case in less philosophical terms:

"Peaceful nations are apt, however, to court unnecessary dangers, because when once aroused they are more inclined to proceed to extremes than predatory nations. For the latter, making war as a means of gain, are usually more ready to call it off when they find an opponent too strong to easily overcome. It is the reluctant fighter, impelled by emotion and not by calculation, who tends to press a fight to the bitter end." {18}

Since the end of World War II, Liddell Hart's observation and the repeated and unfortunate run-ins with the culminating point seem to describe many of the US applications of military force. If so, the concept deserves greater study.

NOTES

1. US Department of the Army Field Manual (FM) 100-5, Operations (Washington, DC: Government Printing Office [GPO], May 1986), 181.
2. Ibid., 182.
3. Carl von Clausewitz, On War, ed. and trans. Michael Howard and Peter Paret, (Princeton University Press, 1976), 572.
4. Ibid., 570. Italics are in the original.
5. Bruce Catton, Never Call Retreat: The Centennial History of the Civil War, vol. 3, (Garden City, NY: Doubleday and Company, 1974), 184.
6. The Blue and the Grey: The Story of the Civil War as Told by Participants, ed. Henry Steele Commager, (New York: The Fairfax Press, 1982), 637.
7. Bruce Catton, Gettysburg: The Final Fury (Garden City, NY: Doubleday and Company, 1974), 108.
8. FM 100-5, 182.
9. "World Wars," Encyclopaedia Britannica, vol. 23, (Chicago: Encyclopaedia Britannica, Inc., 1973), 710. Another objective of the campaign was to open a supply route to Russia.
10. Arthur J. Marder, From Dreadnought to Scarpa Flow (London: Oxford University Press, 1965), 260-67. The British lost the element of surprise by a sustained, but ineffective, naval bombardment of the forts and then proceeded to commit an almost endless sequence of blunders.
11. E.P. Forestel, Admiral Raymond A. Spruance, USN (Washington,

DC: GPO, 1966), 45-47 and 144-47.

12. E.B. Potter, Nimitz (Annapolis, MD: Naval Institute Press, 1976), 398-99, 423-24 and 456-57.

13. James Ladd, Commandos and Rangers of World War II (New York: St. Martin's Press, 1978), 228.

14. Oliver Wendell Holmes Jr., "The Soldier's Faith," The Mind and Faith of Justice Holmes, ed. Max Lerner, (New York: Random House, Inc., 1943), 20.

15. Bruce C. Clarke, "Leadership, Commandership, Generalship, Followership," Armor (September/October 1963): 16-19.

16. Clausewitz, 105 and 139.

17. T.E. Lawrence, Seven Pillars of Wisdom (New York: Doubleday and Company, 1926), 1.

18. B.H. Liddell Hart, Strategy, 2d revised edition (New York: Frederick A. Praeger, Publishers, 1967), 372.

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