The Issue of Attrition

J. BOONE BARTHOLOMEES, JR.

Attrition is a dirty word. Soldiers and politicians seek quick, decisive victories; the World War I-style slugging match evoked by the term attrition is the last thing a commander or statesman wants to replicate. In the tactical and operational realms, this hesitancy is both understandable and desirable. Strategically, it is problematic. People cite Sun Tzu's aphorism "For there has never been a protracted war from which a country has benefited" as if it were true.[1] The American Revolution conclusively demonstrates that he was wrong. In fact, there is an entire and respected branch of strategy, insurgency theory, based specifically on attrition as the preferred defeat mechanism, and at least one author claims special operations forces produce strategic effect best through attrition.[2] The common explanation of insurgency strategy is that it pursues attrition because resource limitations prevent a more nuanced approach; the unstated assumption being if they had sufficient resources, insurgents would fight conventionally. There is, of course, a large grain of truth in that assessment; however, as a strategic approach, attrition has some distinct benefits. In fact, attrition may be the most effective form of strategy available in some types of war or for attaining certain political objectives.

Strategy has its own language, and language is important. Strategists have to all mean the same thing when they use the words of their art. We might start with winning. Strategists in the national security field agree that winning is a political condition of some permanence (not a temporary military, economic, informational, etc. advantage). There is also a general consensus among strategists that winning has physical, moral, and psychological aspects, and all are important. Clausewitz wrote, "Military activity is never directed against material force alone; it is aimed simultaneously at the moral forces which give it life, and the two cannot be separated."[3] So, any strategy needs to address both the material and moral components of war to be successful. When strategists talk about how to win wars, as opposed to other potential strategic military missions such as deterrence or post-conflict activities, they often use the terms annihilation, attrition, and exhaustion. That triptych comprises one useful way of thinking about how strategy works and

---

Dr. J. Boone Bartholomees, Jr., is Professor of Military History in the Department of National Security and Strategy at the US Army War College.

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE **2010**	2. REPORT TYPE	3. DATES COVERED **00-00-2010 to 00-00-2010**
4. TITLE AND SUBTITLE **The Issue of Attrition**		5a. CONTRACT NUMBER
		5b. GRANT NUMBER
		5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)		5d. PROJECT NUMBER
		5e. TASK NUMBER
		5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **U.S. Army War College,Department of National Security and Strategy,Carlisle,PA,17013**		8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)
12. DISTRIBUTION/AVAILABILITY STATEMENT **Approved for public release; distribution unlimited**		
13. SUPPLEMENTARY NOTES		
14. ABSTRACT		
15. SUBJECT TERMS		

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**Same as Report (SAR)**	**15**	

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std Z39-18

serves as the theoretical construct for this article. Understanding these terms and how they interact is important to strategy formulation.

Like many concepts, annihilation, attrition, and exhaustion manifest themselves at all three levels of war, although their utility as theoretical tools at the tactical level is limited. Because the terms can describe both objectives and methods of conducting operations, they are common in operational and strategic thinking. Their utility to theory at the different levels varies, and there is no requirement for conformity between the levels. The strategist might pursue an attritional strategy, but the planner at the operational level need not design an attritional campaign. If he can achieve the results the strategist seeks through a battle or campaign of annihilation, the planner is free to do so. The first blow may produce decisive operational effects, a clear tactical or operational win. That is good, but if the strategist has correctly analyzed the overall environment, it is unlikely those effects will be strategically decisive.

Annihilation

The idea that strategy may be conducted in differing forms goes back at least to Clausewitz, but its most famous proponent was German military historian and critic Hans Delbruck. He named and drew the distinction between what he called annihilation and exhaustion.[4] A strategy of annihilation is based on the idea that a single event or a short series of directly related events can produce victory. Annihilation produces victory by eliminating the enemy's capability to defend. Over time, the concept has developed physical and moral manifestations; that is, advocates have concocted ways to use the basic concept of annihilation to achieve political results in both the physical and moral spheres. In its initial and theoretically pure form, one that emphasizes the physical component of strategy, the strategist uses a single great battle or short campaign to produce strategic effect sufficient to cause the enemy's capitulation. Typically, again in the purest theoretical form, the battle or campaign destroys the opponent's armed forces, leaving the enemy nation vulnerable to ravaging by the victorious forces. The capital falls; forces occupy successive portions of the countryside without opposition and do with them as they wish. Theoretically, the defeated nation accepts the inevitable and surrenders to avoid further punishment; however, that step is not necessary, since the victor has eliminated all possible means of resistance and can do as he desires.

The classic example of this form of an annihilation strategy is Napoleon's campaigns from 1805 to 1807. In October 1805, the French emperor crushed Austrian forces at Ulm and exploited the success by occupying Vienna. Because the Russian army was in the field, the Austrians still had hope and did not surrender when their capital fell. In early December 1805, Na-

poleon defeated the combined Austro-Russian army at Austerlitz. Two days later, completely in accord with annihilation theory, the Austrians agreed to an unconditional surrender as shattered Russian forces hurried back toward Russia. Prussia viewed the French victory and subsequent political reorganization of what had been the Holy Roman Empire as so threatening that it began preparing for war, which did in fact break out in the fall of 1806. Napoleon destroyed the Prussian army at the twin battles of Jena-Auerstadt in October 1806 and ruthlessly exploited his success. The Prussian capital fell, the king fled to Russia, the last remaining Prussian armed force surrendered, and French forces occupied the entire nation. The king of Prussia held out for several months and did not capitulate or sign a peace treaty until July 1807, following Napoleon's defeat of the Russians at Eylau and Friedland.[5] The Ulm-Austerlitz campaign and the simultaneous battles at Jena-Auerstadt produced exactly the strategic military situation annihilation theory demands of armed forces, and produced within days or months the political victory predicted by the theory.

Strategy has its own language, and language is important.

Some caveats are in order, however. Both the Austrians and Prussians were able to continue the initial fight based on the presence of an undefeated ally, and in the Austrian case undefeated elements of its own military. Thus, a campaign rather than a single great battle was required. Even then, a defiant Prussian king ignored reality and refused to surrender, his will not being broken. Nevertheless, when the French army destroyed the allied force, in each case Russian, both Austria and Prussia sought and accepted peace treaties dictated by Napoleon. A second important caveat is that despite being defeated militarily and accepting French terms, neither Prussia nor Austria considered the political issues between them and the French resolved by the respective treaties. The vanquished powers rose again to participate in the final defeat and dismemberment of the French empire less than a decade later.

Moral Annihilation

A more modern and perhaps more sophisticated manifestation of annihilation theory focuses on the moral component of war. This article will call it "shock and awe" as a convenient shorthand and will use the rubric to describe a broad range of strategic activities, not simply the specific concept from which the term was coined. The shock and awe strategy postulates that a single attack on a carefully selected target or set of targets can be so psychologically devastating that it completely demoralizes the enemy and produces surrender, or it paralyzes the opponent to the point he is incapable

of effective defense. A single, well-aimed attack can be so damaging psychologically that it produces decisive strategic effect regardless of its actual physical damage. This prospect is the basis of strategic airpower theory, of strategic concepts such as John Warden's rings, and of operational (turned strategic) concepts like B. H. Liddell Hart's indirect approach. The manner in which advocates postulate the strategic effect will manifest itself is different in each case. The overall intent is to produce moral forces powerful enough to either lead to the immediate surrender of the enemy or cause moral strategic paralysis so complete that even if a subsequent battle is necessary, its outcome is essentially preordained. Shock and awe strategies aim to psychologically disarm the enemy and make him incapable of continuing the fight. The problem with this moral form of annihilation theory is that there is no evidence it works strategically, as opposed to operationally, where it has a well-established record developed over centuries.

Examples of the limitations of shock and awe-style strategies of moral annihilation come from the two US wars with Iraq. Airpower theorists since Giulio Douhet have touted the decisiveness of airpower, initially in terms of breaking the enemy population's will and more recently in terms of attacking the leadership's will or paralyzing national command and control systems. The air campaign that initiated Operation Desert Storm was based on the latter concept. It achieved operational paralysis (Iraqi military resistance in Kuwait was stunned to the point that resistance was ineffective, not counting the tremendous physical losses), but failed to achieve a strategic victory through moral annihilation. The follow-on ground campaign exploited the moral paralysis caused by the air campaign to achieve a classic physical annihilation victory; Coalition forces destroyed the Iraqi army and liberated Kuwait. Nothing suggests the Iraqis would have abandoned Kuwait solely based on the moral pressure of airpower. In fact, one might argue that the command and control paralysis resulting from the air campaign actually dulled the senses of the government and higher-level military leaders by severing their links to forward units so they did not realize how badly the deployed force had been damaged. This circumstance actually made capitulation less likely than might have been the case had airpower been focused solely on the deployed force.

Operation Iraqi Freedom did not have a long air campaign preceding the ground offensive as did Desert Storm. It opened with an air attack unfortunately characterized as "shock and awe" that had significant media hype and from which much was expected.[6] The stated intent of shock and awe, a term its inventors always capitalize, was ". . . to affect the will, perception, and understanding of the adversary through imposing sufficient Shock and Awe to achieve the necessary political, strategic, and operational goals of the conflict or crisis that led to the use of force."[7] Although the authors of the theory were careful to qualify their claims, it was obvious and widely ac-

cepted that the intent was to achieve decisive political results by shock and awe alone. This result did not occur during Operation Iraqi Freedom; the massive shock and awe air campaign did not produce even the undeniable operational paralysis of the Desert Storm campaign.

The issue is not the utility or decisiveness of airpower; someday airpower will inevitably be independently decisive. The point is the unproven reliability and predictability of the strategic decisiveness of shock and awe-style, moral-focused annihilation strategies. Modern political actors, whether state or nonstate, have the inherent resilience to overcome the psychological impact of even the most massive, well-targeted, and professionally executed psychological campaign, whether physical or informational. This resilience is particularly true of the two main types of political actors the United States might face in the future, authoritarian governments and ideological or faith-based nonstate actors. If annihilation strategies have recognized drawbacks, perhaps there is merit in attrition-based strategies after all.

Attrition and Exhaustion

Delbruck called his second method of executing strategy "exhaustion." Modern practitioners generally use the terms attrition and exhaustion interchangeably. The *Department of Defense Dictionary of Military and Associated Terms* does not define either. Regardless of usage, the terms are closely associated. Technically, however, they refer to different aspects of the same strategic concept; both refer to activities intended to reduce enemy capability over time. Clausewitz tells us, ". . . a review of actual cases shows a whole category of wars in which the very idea of defeating the enemy [military] is unreal."[8] He went on to observe that "[i]nability to carry on the struggle can, in practice, be replaced by two other grounds for making peace: the first is the improbability of victory; the second is its unacceptable cost."[9] Annihilation creates the inability to carry on. Attrition and exhaustion produce either (or both) the improbability of victory or the unacceptable cost. Attrition tends to be associated with the destruction of military forces while exhaustion refers to the gradual degradation of a broader range of national capabilities (military forces, economic or industrial power, will, etc.). As with cases of annihilation, both attrition and exhaustion have physical and moral aspects. The distinction between attrition and exhaustion is important theoretically but often very difficult to determine and of little real import to most practitioners, provided they understand that both approaches are possible and how they work.

Physical Attrition

A combatant using a physical attrition strategy intends to win by destroying the enemy's military forces over time in a series of perhaps unre-

lated battles and campaigns. Generally, there is an unstated assumption that for a variety of reasons a single decisive battle is impossible or undesirable. In a purely attrition campaign there is no expectation of strategic advantage beyond inflicting casualties. The measure of success is how much one hurts the enemy; territory captured or other potential measures of effectiveness are distinctly secondary considerations, almost by-products. Physical attrition produces victory in one of two ways. The primary intent is for the enemy to realize it cannot win and will continue to suffer casualties; it surrenders based on lack of hope. Alternatively, the enemy military is so severely depleted over time that it eventually is incapable of defending itself and is destroyed, leaving exactly the same strategic outcome as an annihilation victory.

The German strategy for 1916 was a classic attrition strategy. It was implemented during the Verdun campaign on the Western Front between February and December 1916. The Chief of the German General Staff, Eric von Falkenhayne's, announced goal was to "bleed France white." He attempted to break the French army by inflicting an unacceptable level of casualties. The city of Verdun had great psychological import for the French, which increased as the battle raged month after month; however, to Falkenhayne the importance of the battlefield was only that the French would fight for it. In the end, after inflicting more than 500,000 casualties, the Germans failed to win. Although they crippled the French army, it did not flee or surrender.[10]

One of the major problems with physical attrition as a strategy or tactic is the tendency of intelligent enemies, given an alternative, to refuse to fight battles likely to have no benefit and result in losses to their forces. A second problem with physical attrition is that in war one expects to suffer casualties as well as inflict them. In the Verdun example, the German army suffered some 434,000 casualties in an effort to inflict about 550,000 on the enemy.[11] Thus, attrition logically favors the larger force unless the adversary can achieve some peculiar advantage through asymmetry. Attrition is usually more advantageous strategically to the attacker as long as he can opt to cease attacking when he begins to suffer unacceptable losses. Conversely, tactically attrition usually favors the defender based on the natural advantages of the defense.

Physical Exhaustion

Physical exhaustion works in a more complicated manner. There may be (and usually is) an attrition campaign associated with an exhaustion strategy, but the objective is different. In exhaustion, there is little or no faith in the ability of attrition to produce victory. Instead, the plan is to broadly attrite the enemy nation. Exhaustion campaigns often involve actions directed against the enemy homeland (for example, blockades) designed to limit eco-

nomic capabilities by denying resources; attacks on enemy industries (such as bombing campaigns) intended to directly destroy economic capability; or actions against enemy populations (bombing or perhaps information campaigns) intended to erode will and popular support.

Yes, attrition is a bad word, but its reputation is ill-deserved.

The Allied war against Japan from 1941-45 is a good example. There were huge air, ground, and sea campaigns in the central Pacific, southwest Pacific, and Chinese theaters. While contemporary leaders would have shied away from calling these efforts campaigns of attrition, that is exactly what they were in the strategic context. Simultaneously, the US Navy waged the only successful unrestricted submarine warfare campaign in history against the Japanese naval and merchant fleets. By war's end, US submarines were roaming at will through Japan's home waters and having difficulty finding suitable targets because Japanese maritime assets had already been attrited. Deprived of imports, the Japanese economy ground to a standstill. Another element of the strategy was the strategic bombing of Japan aimed at the physical and psychological destruction of the home islands. Once the naval campaigns gave long-range bombers bases from which they could reach Japanese targets, the US Army Air Forces began to systematically devastate Japan, a trend that only ended with the destruction of Nagasaki and Hiroshima and the surrender of Japan. Overall, the elements of the campaign were symbiotic. For example, surface and air successes at sea made submarine operations easier, and submarine operations destroyed fuel and other resources that might have prolonged Japanese resistance elsewhere. Similarly, the submarine and strategic bombing campaigns reinforced one another, especially in terms of their impact on the Japanese economy. The strategy employed attacks on both the physical and moral aspects of the Japanese empire. In the end, Japan surrendered because the emperor believed further resistance was futile; his will broke. Had he not surrendered, the Allies had shaped the strategic situation so that they were prepared to invade mainland Japan and directly impose surrender. There was little Japan could do in either case, and that is exactly how exhaustion is supposed to work.[12]

Exhaustion strategies need not be so massive, complex, or synchronized. As part of their grand strategy, the Germans executed a naval strategy of physical exhaustion against Great Britain in World War II. Their unrestricted submarine warfare campaign in the Atlantic had the potential (in the end, not fulfilled) to produce decisive strategic results. The U-boats avoided warships and targeted merchant shipping in hopes of strangling Great Britain's economy. The campaign had to be conducted over time (there was no possibility of a strategic annihilation attack), and sinking any ship anywhere was an effective strategy. Tonnage counted, not necessarily the nationality

of the vessel or its cargo, although fuel, munitions, and other war materials were a welcome additional benefit.

German resources committed to the U-boat campaign were minuscule when compared to the total war effort. Only 1,153 U-boats crewed by about 39,000 sailors were commissioned during the war.[13] A small fleet of resupply vessels supported them. The battles occurred beyond German air support range and involved no more than a handful of U-boats at any time. While wolf packs (the German term for a tactical grouping of submarines) occasionally had as many as 26 U-boats, they never operated close enough together to concentrate more than a few submarines at a time on any single convoy.[14] For example, when wolf pack *Vorwarts* comprised of 12 U-boats attacked the 32-ship convoy ON-127 between 9 and 14 September 1942, every submarine engaged at some point in the battle, but only once did as many as five U-boats attack the convoy, in single-boat attacks spread over several hours. The wolf pack managed to sink eight ships (51,619 tons) and damage seven others.[15] Such effort added up over time, and the Allies needed herculean efforts in countersubmarine technology, shipbuilding, general economic production, and code breaking (not to mention the skill and bravery of both civilian and military crews) to survive. Winston Churchill wrote, "The only thing that ever really frightened me during the war was the U-boat peril . . . . It did not take the form of flaring battles and glittering achievements, it manifested itself through statistics, diagrams, and curves unknown to the nation, incomprehensible to the public."[16] That is what exhaustion strategies are all about.

As with its cousin physical attrition, physical exhaustion logically works best for the side that has extensive resources. In both cases, achieving the desired erosion of the enemy inevitably produces friendly losses. A larger force can better sustain the punishment it receives while attriting the foe. Because exhaustion generally works on several lines of operation, it can require even more resources than a purely military-oriented attrition campaign. But working on multiple lines of operation, or using multiple campaigns, allows the strategist to shift his effort between the lines while maintaining overall pressure on the opponent, receiving additional benefit for the resources expended. The strategic advantage of the attacker and tactical advantage of the defender in a physical exhaustion strategy are identical to those in a physical attrition campaign, and primarily for the same reasons. The main disadvantage of physical attrition and exhaustion (besides friendly casualties) is the length of time required to see them to conclusion. Physical attrition is most necessary against fairly robust enemies that cannot be defeated in one fight. Attriting a large and capable enemy simply takes time and consumes resources. It also gives a resourceful enemy (as we assume they all are) time to adjust his strategy and tactics. It becomes a race among

resilience, time, and asymmetric advantages. That aspect broaches another interesting aspect of attrition as a strategy, how it works in the moral sphere.

Moral Attrition and Exhaustion

Moral attrition strategies mainly differ from other strategies in that their aim is to erode will over time. Erosion of will can be achieved physically by the same processes as physical attrition, but in this case the strategic intent is to convince the target audience that further resistance is fruitless and will only result in more casualties. Moral attrition may target policy-makers, elites, or populations. Ideally, the enemy surrenders before his entire force, economy, or society has been destroyed. Moral attrition campaigns also can be conducted using information operations as the major (even sole) component of the strategy. Propaganda convinces the enemy that resistance is futile, and the future following surrender will be better than can be achieved otherwise. An ideal case might produce a bloodless political conquest.

The classic example of moral attrition is the North Vietnamese victory over the United States in the Vietnam War. One can debate exactly what the North Vietnamese intended or how well events followed their plan, but the result is undeniable. Without losing a battle, with a large and very capable force still in the field, and with absolute control of the air and sea, the United States conceded the strategic point and withdrew its forces based entirely on political opposition at home. Over time, the will of American society broke as a result of the moral attrition of national will.[17]

Physical attrition assumes a cost-benefit reasoning as the basis for strategic will. The enemy surrenders when he realizes he cannot win or the cost becomes too great. Clausewitz reflected that kind of thinking when he wrote, "Once the expenditure of effort exceeds the value of the political object, the object must be renounced and peace must follow."[18] Clausewitz was not correct about everything, however. Decisions concerning war and peace do not often work in the rational manner he implied or that physical attrition assumes. Emotion often plays the decisive role. This is particularly true when the will of the people is involved to a significant degree. Clausewitz remarked, "The less involved the population and the less serious the strains within states and between them, the more political requirements in themselves will dominate and tend to be decisive."[19] As he presented his trinity of violence, chance, and subordination to policy, the Prussian said, "The first of these three aspects [primordial violence, hatred, and enmity] mainly concerns the people."[20] Clausewitz recognized that the population can become strangely, even totally, committed to a war in a disruptive way. It is the people who interject hatred and passion into what at the strategic level might otherwise be a totally rational political activity. In fact, gaining, sustaining, and regulating the passion of the people, not letting it become too great or

drop too low, is one of the major functions of wartime political leadership. Conversely, the people's will breaks (they cease to support the war) not based on rational calculations of profit and loss but on irrational, subjective, often uninformed assessments of the strategic situation.

Attrition and Will

Debates about war and peace occur naturally when states are involved in conflict; a similar phenomenon occurs in nonstate groups. Authoritarian governments and nonstate actors are arguably better at controlling the outcomes of such debates than their democratic counterparts. Autocratic states and networks still have elite and collective will; however, it is subject to emotional swings that even the most ruthless and efficient autocrat cannot completely control. This fact is important because attrition and exhaustion strategies designed for moral impact invariably work against the will of the people, the elites, and leadership. The assumption is that will is the key to war. Clausewitz opined that, "Yet both of these things [destroying the armed forces and occupying the country] may be done and the war . . . cannot be considered to have ended so long as the enemy's will has not been broken."[21] But will is a complex concept. It is by definition political in consequence; however, it sometimes works by serendipitous rules.

There is an element in every society that absolutely will not support war for any reason. The adrenaline-like rush of patriotism at the outbreak of a conflict usually drowns them out. As wars drag on, however, opponents' voices are heard more loudly, especially given the fact that war is morally difficult to justify. Arguments about national interests do not have much traction in discussions where the primary critique is that resources are being wasted and people needlessly killed. Unless countered by skillful politicians, the antiwar movement can eventually out shout what Richard Nixon called in the context of Vietnam War protests "the silent majority."[22] This realization is important because the antiwar faction gains traction as wars grind on. Attrition and exhaustion strategies, by their very nature and design, take time and result in casualties. They are therefore vulnerable to an erosion of political will. This caveat is particularly true in modern America, which according to common wisdom has become averse to casualties (enemy or friendly) and any kind of collateral damage.

Using Afghanistan as an example, when this article was written in early 2010, the number of Americans (685) killed in battle in Afghanistan since the beginning of US operations was slightly less than the number (687) who died in 2006 from stumbling, slipping, or tripping and was equal to four percent of those (16,883) who used a gun to commit suicide.[23] Yet, the pressure on the Obama Administration to withdraw from that conflict increases daily. Rhetoric about grand strategy, national interests, interna-

tional terrorism, or safe havens does not convince the antiwar faction, and explicitly announcing that the United States is fighting an attrition battle and does expect casualties risks a political disaster. This sensitivity to casualties makes attrition strategies rather difficult but not impossible. In fact, some political objectives seem to demand attrition strategies.

The Value of Attrition

When is attrition an effective, even a desirable, strategy? Several strategic circumstances make strategic attrition attractive. Each relates to a peculiar aspect of the strategy or the strategic environment.

Perhaps counterintuitively, attrition is the preferred strategy of underdogs. Both terrorism and insurgency theories are based on attrition or exhaustion strategies. If attrition logically favors the larger force because it can better tolerate casualties, underdogs should not be attracted to it. That is not the case, and the reason is actually very logical and in keeping with theory. Even Clausewitz, who has been denigrated for years as the apostle of the big, decisive battle, commented, "It is possible to increase the likelihood of success without defeating the enemy's forces."[24] Remember that attrition strategically favors the attacker since he can regulate his own pain; he can select when, where, and how hard he attacks and thus control to at least some extent his losses. Next, the underdog can hope to change the battle to one of will, where he may suppose he has the advantage. Given the right conditions, that choice allows an underdog to fight a superior enemy with some hope of eventual success; he does not have to achieve all objectives in a single event. Attrition may, in fact, be his only chance of winning.

How does an underdog hope to win? Certainly not by direct attacks on a superior enemy military, or even by means of physical attrition. Maoist insurgency theory postulates a gradual building of forces until the insurgent can eventually beat the enemy, but by then the fight would be a conventional conflict, and the insurgent would no longer be the underdog.[25] Counterinsurgency expert Sir Robert Thompson thought the progression to conventional war was a peculiarly Chinese phenomenon based on unique circumstances such as the enormous size of the country.[26] One should note that Mao also postulated the build-up of insurgent forces, not the erosion of the enemy. Regardless, the underdog typically seeks moral attrition, not physical attrition. He exploits the strategic advantage of regulating any negative impact on his own force by attacking only at places and times of his choosing. He hopes to win through psychological effects (exhausting the will of either the people or the government) rather than any misguided hope of destroying the enemy's comparatively larger military force or breaking the opposing will in a single encounter. In fact, within this strategic equation the enemy's military is largely irrelevant except as (1) a force to be feared and avoided unless the

situation presents a disproportionate advantage and (2) a convenient and legitimate target for carefully planned, small-scale attacks.

Expect your investment to be substantial and the resistance to be intense.

Countering persistent terrorism or insurgency almost always dictates adopting an attrition strategy. Competent nonstate actors that compete against governments are not especially vulnerable to annihilation. If government forces can locate and engage a nonstate actor such as a terrorist or insurgent group, they can destroy it. Thus, the best insurgents (the ones who survive the early stages of an active insurgency) are very good at concealing themselves and avoiding contact, unless it is on their own carefully chosen terms. So, if annihilation is problematic against a competent insurgent, what choice of strategy remains? Exhaustion or attrition. Again, killing all the insurgents or terrorists is problematic (although not impossible; strategists should never give up on physical attrition since it is an inherent aspect of all types of attrition and exhaustion strategies). The most likely path to success, though, involves inflicting such unrelenting pressure and pain on the insurgent or terrorist that eventually, despite perhaps fanatical commitment to the cause for which he fights, it becomes obvious that victory is impossible, and he stops fighting. Such pressure cannot be only military or primarily physical. It also includes actions designed to erode economic capability and ideological support from the local populace. If it helps to think of this as winning hearts and minds, so be it; however, most governments do not have to win the hearts and minds of the population, they simply have to ensure the insurgent does not. An insurgency will not exist long without significant, active popular support. Some individuals will never give up—they should be killed or imprisoned for life—but the vast majority will not fight indefinitely for a losing cause regardless of how fervently they may believe in that cause. The problem for the government will always be sustaining support (political will) during any long and painful attrition campaign; ideally avoiding becoming physically or morally attrited and exhausted.

Moral attrition and exhaustion have another advantage that often goes unrecognized or unconsidered. They are particularly well-suited for achieving significant political objectives. Breaking the enemy government and population's will through a long, painful attrition strategy offers a greater likelihood of longer-lasting, more significant results (political victories) than does a quick victory. Annihilation happens too quickly and leaves large segments of the enemy political structure and population intact and feeling undefeated. They suffer nothing and feel no pain; suddenly, someone announces they are defeated. Edward Luttwak wrote an article titled "Give War a Chance" in which he argued that the international community intervenes too quickly to stop wars. Rather than stopping the fighting for immediate humanitarian

reasons, Luttwak argues it is best to allow wars to continue to logical conclusions that resolve political issues and yield greater humanitarian results. Then, peacekeepers might be effective, and nation-building may succeed.[27] That concept was evident in the case of the Austrians and Prussians rising to participate in the dismemberment of the Napoleonic empire. Although beaten, they did not feel the political issue was settled. One can also argue that the biggest impact of Turkey's decision not to allow a northern attack on Iraq from its territory during Operation Iraqi Freedom was that large segments of the Iraqi population, especially the important Sunni regions, did not experience the war or even see a Coalition soldier until after the government had been declared defeated. That background made the subsequent insurgency easier to accept for those Iraqis, although the insurgency obviously is not rooted in the absence of a northern attack.

Another important strategic consideration is the simple political fact that one can expect more intense and determined resistance when he aims at very significant political objectives than is likely if the objective is relatively inconsequential. "Since war is not an act of senseless passion but is controlled by its political object, the value of this object must determine the sacrifices to be made for it in magnitude and also in duration."[28] If you want something on a grand scale, expect your investment to be substantial and the resistance to be intense. Given the expectation of significant resistance both in terms of effort and duration, the prudent strategist will eschew the siren call of quick victory through an annihilation strategy and select an attrition strategy focused on the enemy's will. Subordinates may execute that strategy operationally and tactically using annihilation campaigns and battles, but the hope of winning a long-lasting victory in one smashing blow is generally illusory.

Conclusion

Yes, attrition is a bad word, but its reputation is ill-deserved. Readers may not accept the distinction this article asserts between the utility of attrition at the various levels of war. Admittedly, the blurry overlap of operations and strategy often exacerbates the difficulty of discerning attrition's true impact. People have a natural tendency to be impatient and seek the quick strategic solutions offered by annihilation strategies. Strategists and statesmen often do not realize, ignore, or cannot accept the utility of an attrition or exhaustion strategy when the objective is significant or the end-state is intended to be long-term. There is little recognition that the larger enemies at one end of the spectrum of conflict and the smaller, agile ones at the other are usually most vulnerable to attrition strategies. Strategists seldom conceptualize their work as attritional even when combating insurgents who themselves employ an attrition strategy. Not accepting that the situation demands

an attritional strategy usually means the strategist will fail to take the prudent steps to procure resources and reinforce will that can be the keys to success. Even if he eventually succeeds, the risk is high that his movement or military muddled through at a greater cost than should have been required.

Clausewitz warned that "[t]he first, the supreme, the most far-reaching act of judgment that the statesman and commander have to make is to establish by that test the kind of war on which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature."[29] That is good advice, since while the strategist should never give up on attempts to shape the strategic environment, he should also accept that doing so is often difficult and it is necessary to be prepared to fight the conflict he actually faces. If the situation demands immediate results and the strategic environment is suitable, an annihilation strategy is essential; if not, then another strategy may be desirable. The strategist has to be aware of the potential benefits and costs associated with each type of strategy considered. He should never discard a strategic approach simply because it has a bad name.

NOTES

1. Sun Tzu, *The Art of War*, trans. by Samuel B. Griffith (1963; reprint, New York: Oxford Univ. Press, 1973), 73.

2. James D. Kiras, *Special Operations and Strategy from World War II to the War on Terrorism* (New York: Routledge, 2006).

3. Carl von Clausewitz, *On War*, ed. and trans. by Michael Howard and Peter Paret (Princeton, N.J.: Princeton Univ. Press, 1976), 137, 90.

4. Gordon A. Craig, "Delbruck: The Military Historian," in Peter Paret, ed., *Makers of Modern Strategy: From Machiavelli to the Nuclear Age* (Princeton, N.J.: Princeton Univ. Press, 1986), 341-42.

5. For historical details see David G. Chandler, *The Campaigns of Napoleon* (New York: Scribner, 1966); David G. Chandler, *Jena 1806: Napoleon Destroys Prussia* (New York: Praeger, 1993); Ian Castle, *Austerlitz 1805: The Fate of Empires* (Oxford, U.K.: Osprey Publishing, 2002); Gregory Fremont-Barnes and Todd Fisher, *The Napoleonic Wars: The Rise and Fall of an Empire* (Oxford, U.K.: Osprey Publishing, 2004); or any of hundreds of available sources.

6. The theoretical basis of shock and awe was Harlan K. Ullman and James Wade, Jr., *Shock and Awe: Achieving Rapid Dominance* (Washington: National Defense University, Institute for National Strategic Studies, 1996), http://www.dodccrp.org/files/Ullman_Shock.pdf.

7. Ibid., 19.

8. Clausewitz, 91.

9. Ibid.

10. For more on the battle see Alistair Horne, *The Price of Glory: Verdun 1916* (New York: Penguin Books, 1993); William Martin, *Verdun 1916*: "*They Shall Not Pass*" (New York: Praeger, 2004); or Michael Duffy, "The Battle of Verdun, 1916," 22 August 2009, http://www.firstworldwar.com/battles/verdun.htm.

11. Duffy.

12. On World War II in the Pacific see D. Clayton James, "American and Japanese Strategies in the Pacific War," in Paret.

13. Although various censuses of U-boats and crews exist, the author has accepted the data shown as both the most authoritative and close to the highest possible total. "All Boats of WWII," http://www.uboat.net/boats/listing.html.

14. For a comprehensive summary of wolf pack composition and results see "List of Wolfpacks," http://www.uboat.net/ops/wolfpacks/.

15. "ON-127," http://www.uboat.net/ops/convoys/convoys.php?convoy=ON-127.

16. Winston Churchill, *Their Finest Hour* (Boston, Mass.: Houghton Mifflin, 1949), 598.

17. There are an increasing number of good books on the Vietnam War. Among them are Harry G. Summers, Jr., *On Strategy: A Critical Analysis of the Vietnam War* (Novato, Calif.: Presidio Press, 1982); Guenter Lewy, *America in Vietnam* (New York: Oxford Univ. Press, 1978); and Adam M. Garfinkle, *Telltale Hearts: The Origins and Impact of the Vietnam Antiwar Movement* (New York: St. Martin's Press, 1995).

18. Clausewitz, 92.

19. Ibid., 81.

20. Ibid., 89.

21. Ibid., 90.

22. Richard M. Nixon, "Nixon's Address to the Nation on the War in Vietnam," 3 November 1969, http://www.watergate.info/nixon/silent-majority-speech-1969.shtml.

23. Department of Defense, "Casualty Update," as of 26 January 2010, http://www.defense.gov/news/casualty.pdf; Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, "WISQARS Leading Causes of Death Reports, 1999-2006," http://webappa.cdc.gov/sasweb/ncipc/leadcaus10.html.

24. Clausewitz, 92.

25. On Maoist insurgency theory see Mao Tse-tung, *On Guerrilla Warfare*, trans. by Samuel B. Griffith II (Urbana: Univ. of Illinois Press, 2000).

26. Robert Thompson, *Defeating Communist Insurgency: The Lessons of Malaya and Vietnam* (St. Petersburg, Fla.: Hailer Publishing, 2005), 43.

27. Edward N. Luttwak, "Give War a Chance," *Foreign Affairs*, 78 (July/August 1999), 36-44.

28. Clausewitz, 92.

29. Ibid., 88.