STRATEGY

The Logic of War and Peace

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The Belknap Press of Harvard University Press Cambridge, Massachusetts, and London, England

larities of context lose their importance and where the full array of rival forces is considered instead of only those immediately opposed. For this we must ascend to the next level of strategy, after noting that though we have viewed an episode of ground combat, every other form of warfare past and present, at sea, in the air, or even in space—including warfare loosely described as "strategic".*—must have its own tactical level.

*During the last fifty years or so, the habit has developed of applying the adjective "strategic" to long-range forces and weapons, as opposed to their shorterrange counterparts, and we hear of "strategic" and "tactical" bombers and missiles. We obtained this unfortunate terminology from the rhetoric of the early airpower advocates, by way of deliberate transposition: bomber aircraft claimed to be war-winning on their own were first promoted as strategic to convey their self-sufficiently decisive quality (as opposed to merely tactical roles in support of hitherto decisive troops); then the adjective became associated with the incidental attribute of long range, which some bombers would need in order to be of strategic effect in some geographic settings, and that in turn caused "tactical" to acquire the attribute of short range. The poor fit is obvious: if Belgium were to bomb New Zealand into submission, long-range aircraft would be needed, but tactical aircraft would suffice to achieve that same strategic purpose if adjacent Luxembourg were to be the victim; yet if Belgian aircraft were to hunt submarines off the New Zealand coast, a tactical mission, they would need to have a "strategic" range.

CHAPTER 7

THE OPERATIONAL LEVEL

language military terminology that it has no word of its own for what stands between the tactical and the strategic, to describe that middle level of thought and action wherein generic methods of war contend and battles unfold in their totality. In the modern tradition of continental European military thought, by contrast, there is an adjectival term in common use directly translatable as "operational," and this level is indeed salient in German and Soviet professional military literature, whose primary concern is with operational art, as opposed to tactics narrowly applicable to specific types of forces (infantry tactics, air-combat tactics, antisubmarine tactics).

of course the demarcation between tactical, operational, and strateuncover the natural stratifications of strategy in any given episode all the forces involved, and in the actual adventures and misadvenmethods of action (blitzkrieg, defense in depth, "strategic" air another at the tactical level, at the operational level we encounter level of strategy, and the forces directly opposed that fight one is to have meaning. gic requires the presence of a certain scale and variety of means if it to grasp what is operational and what comes below and above. But again, there is no need for any arbitrary definition: we need only life case, even if very difficult to demarcate in the abstract. Once methods, ongoing command, and action is self-evident in any realtures of those forces. The boundary of what is "operational" in bombardment, layered naval air defense), in the ongoing command of the struggle of the directing minds, as expressed in conceptual Just as it is the weapons themselves that interact at the technical

At one extreme, for a primitive tribe whose entire force consists of identically armed warriors who always fight in a single formation,

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the tactical, operational, and strategic must coincide for all practical purposes. Such a tribe cannot suffer a tactical defeat that is not also strategic, nor can it develop a method of war that is more than a tactic. By contrast, say for the United States in World War II, quite different operational situations could coexist even within the same theaters of war, and very different operational methods were relevant in the amphibious campaigns of the Pacific, in the "strategic" bombing of German industry, in the eleven months of continental warfare that began with the Normandy landings, and in the struggle for naval supremacy in the Pacific waged chiefly by aircraft-carrier task forces.

Scale and variety are necessary conditions, but they are not sufficient: if the operational level is to have any substance of its own, the action must also consist of more than the sum of tactical parts—and that depends on the prevailing *style of war* in the given setting, more specifically on its place within the spectrum of attrition and maneuver.

ATTRITION AND MANEUVER IN WARFARE

material loss, relative to the enemy's strength. ity, and there can be no cheap victories, in either casualties or this style of war without an overall superiority in attritional capacrocal attrition will have to be absorbed. There can be no victory in mathematically assured. It is understood that the enemy's recipstatic targets (trenchlines, cities) or of enemy forces that must resmaller is the need for the application of any operational method. ply suffice, along with a repetitive tactical repertoire, and the routinized techniques of target acquisition, movement, and resupeventually to destroy the full inventory of enemy targets, unless firepower is of appropriate form and of sufficient quality, victory is fore), so long as material superiority is indeed maintained and the main concentrated to achieve their purposes (not guerrillas there-So long as firepower-producing forces are brought within range of The greater the attrition content of a style of war, the more will retreat or surrender terminates the process (as is usually the case). the cumulative effect of superior firepower and material strength, treated as a mere array of targets, and success is to be obtained by Attrition is war waged by industrial methods. The enemy is

There is no such thing of course as attrition warfare in pure form

superiority was in error, because of the effects of distance, the engagements (in this case the German self-perception of material ments between artillery forces; the Luftwaffe's attempt to defeat battles were dominated by highly symmetrical brute-force engagetent include the trench fighting of World War I, many of whose process, but examples of warfare with a very high attritional conentirely devoid of cunning or artifice and reduced to an industrial quality of the Spitfire, and the excellence of British pilots); Montthe Royal Air Force in 1940 by deliberately seeking air-combat attempt at Anzio), which degenerated into a frontal grinding action mor; the German submarine campaign of 1941-1943, whose goal gomery's battle at El Alamein, and most of his later battles, in even though enemy forces stubbornly refused to assemble in convecould; Ridgeway's Korean offensives of 1951-52, in which ground breakout from Normandy, which Patton subverted insofar as he ostensibly aimed at industrial attrition but actually aimed at urban of very slow effect; the air bombardment of Germany and Japan, Allied campaign in Italy (after the failure of the outmaneuvering oceanic shipping below the level needed to sustain the war effort; the was to win the war by reducing the total tonnage of any and all then frontally assaulted by infantry, before being overrun with arwhich the enemy was first barraged by vastly superior artillery and percentages of each. opponents from aggression by threatening the destruction of statec populations and industry for nuclear attack, in order to dissuade and destroy"); and, as a notional case so far, the targeting of urban voluntary concentration by sweeps of concentric pattern ("search choosing, so that attempts were constantly made to impose inniently targetable mass formations except at moments of their own power and artillery; much of the American fighting in Vietnam. Chinese and North Korean forces systematically reduced by airforces slowly advanced, in a solid front from coast to coast, against housing; Eisenhower's concept of a broad-front offensive after the

At the other end of the spectrum there is relational maneuver, action related to the specifics of the objective, where instead of seeking to destroy the enemy's physical substance, the goal is to incapacitate by systemic disruption—whether the "system" is the command structure of the enemy's forces, their mode of warfare and combat array (as when a linear front is pierced or a battle-fleet defense in depth is penetrated), or even an actual technical system

(the deception of a radar, as opposed to its brute-force jamming or outright physical destruction).

Instead of seeking out the enemy's concentration of strength, since that is where the targets are to be found in bulk, the starting point of relational maneuver is the avoidance of the enemy's strengths, followed by the application of some selective superiority against presumed enemy weaknesses, physical or psychological, technical or organizational. While attrition is a quasi-physical process that guarantees results proportionate to the quality and volume of the effort expended, and conversely cannot yield success without material superiority, the results of relational maneuver depend on the accuracy with which enemy weaknesses are identified, the surprise achieved, and the speed and precision of the action. Some combination of surprise and speed is a precondition of success because the enemy who has time to react can shield those weaknesses against which the effort is unfolding.

as compared to the gain hoped for, but this can still be a great deal cost but of low risk, whereas relational maneuver can be of low cost contrast, can fail "catastrophically," just as it can succeed with in absolute terms. be lost than the relatively small effort that was made, of "low cost" but may entail high risk. True, if the risk materializes, no more can the entire operation. In other words, attrition is warfare paid at full very little, because an error of assessment or execution can wreck larger action is not thereby endangered. Relational maneuver, by fied or missed, that target will have to be attacked again, but the imposes only a proportionate penalty: if a given target is misidentifully," just as it can succeed only cumulatively, because each error strength. In the language of the engineer, attrition fails "graceweakness cannot perform its own task or encounters unexpected pletely, if the selective strength narrowly applied against presumed materially weaker; second, relational maneuver can fail comapplied to the effort, and thus a chance of victory for the side possibility of results disproportionately greater than the resources Two consequences follow: first, relational maneuver offers the

There is one more consequence: because it requires accuracy in identifying enemy weaknesses, as well as speed and precision in the action taken to exploit them, relational maneuver will not usually allow the free substitution of quantity for quality. Instead it will impose irreducible qualitative standards with numerical substitu-

Germany through the Dutch backdoor by means of simultaneous parachute and glider landings, meant to seize successive bridges for

tion possible only once those standards are exceeded, and limited in any case by the need for surprise and speed. Moreover, at the actual points of contact, where the selected strength is finally applied, combat is quite likely to result in extreme attrition at the tactical level, even if combat with the enemy's main strength is successfully avoided at the operational level.

neuver. As with attrition, what varies from case to case is the maneuver content include the failed 1915 Gallipoli amphibious oprelational-maneuver content of the overall action, and that-here eration of World War I, which was intended to force Ottoman Turoperational level. Examples of warfare with a high relational methods. The more relational maneuver, the more important is the is the important point—defines the scope of operational-level defeated an Italian army vastly superior numerically by a motorized ocean space; the 1940 British campaign in North Africa, which grouping ships into convoys that moved inside a tiny fraction of exploited a lack of long-range air reconnaissance to find targets by Anglo-American response to Germany's U-boat campaign, which of supply lines, command centers, and planning expectations; the penetration of motorized forces in depth, with wholesale disruption row-front attacks by infantry and artillery, followed by the rapid borders against broad-front offensives, were instead pierced in nar-(until 1942), whereby linear defenses, organized to defend national lands, Belgium, France, Yugoslavia, Greece, and the Soviet Union the German army against Poland, Denmark, Norway, the Netherpiece from the Persian Gulf and Egypt; the blitzkrieg operations of Istanbul, in lieu of reducing Turkish armies in the field piece by key out of the war by a swift offensive against the then capital of in Malaya, which defeated numerically and materially superior Britmunication along the Libyan coast; the 1941-42 Japanese campaign penetration through its desert flank, to cut off the only line of comof September 1944 (Operation Market-Garden) to invade northern ther retreat down the peninsula; the deep-penetration offensive of tions through the jungle or amphibiously, each time forcing a furish forces by repeatedly outflanking their coastal-road communicaforces in northwestern France after Normandy; the failed attempt Patton's Third Army in July-August 1944 that rolled up the German Again, there is no warfare that consists purely of relational ma-

slowness of British armor, among other things); Patton's December all the way to the Rhine at Arnhem (which was undone by the a swift overland offensive by British armor-spearheaded columns man forces that had advanced westward through the Ardennes; the 1944 outflanking counteroffensive from the south against the Gertrated bombing of industrial bottlenecks, instead of the generic failed attempts to disrupt the German war economy by the concenvillage-defense effort of the U.S. Marines, which energized local pushed back by frontal offensives; and some of the American action invading North Korean forces were cut off rather than laboriously into central Korea by way of the Inchon landings, whereby the bombing of urban-industrial areas; MacArthur's 1950 countermove opponents from aggression by threatening their centralized control tack, as opposed to the population at large, in order to dissuade targeting of political and military command centers for nuclear atmilitia in bulk with a handful of marines; and, in a notional case, the in Vietnam, as in the case of the highly successful but interrupted

ATTRITION AND MANEUVER IN WAR PREPARATION

By now it will have become obvious that attrition and relational maneuver are present in peacetime military policy as much as in actual warfare. We may compare the two, for example, in the research and development of military equipment. Under an attritional approach, when the aim is to secure technical advantage by the generous use of resources, the conduct of research and development requires no particular tactical or operational focus: the goal is to obtain "best" systems, which maximize every aspect of performance, subject only to cost ceilings.

Accordingly, new equipment is developed ex novo to avoid prior design constraints. Large changes will often be needed in maintenance arrangements, supporting ancillaries, and possibly in training when the new weapons eventually arrive to replace what was there before. Only truly major gains in performance can justify the resulting costs, which are of course added to those of the development effort itself, so that large engineering or scientific advances must be achieved. That makes research and development expensive and also requires ample time for calculation, prototyping, trials, recalculation, further prototyping, and more trials. Finally, because the

period of gestation is so long, it is only by coincidence that the particular characteristics of new weapons will match the *specific* configuration of enemy vulnerabilities or the *specific* tactical requirements of the forces to which they are issued. Perhaps that was the original intention, or perhaps technical goals alone guided the entire effort—but in either case by the time the new equipment arrives, former enemy weaknesses may well have become strengths while the operational methods of the users may have changed as

Under a relational-maneuver approach, by contrast, the aim of research and development is precisely to obtain technical abilities that exploit specific enemy vulnerabilities and are congruent with tactics and methods shaped by the same purpose. To do so in timely fashion, that is, while the presumed weaknesses persist, new equipment cannot usually be developed ex novo and must instead be obtained by the modification or recombination of components already in hand. This obviously imposes design constraints that hinder the full exploitation of all the possibilities offered by scientific and technical progress. Moreover, because improved designs are introduced at relatively short intervals, compatibility with equipment previously issued is essential to avoid ruinous integration costs, and that imposes further design constraints. Finally, truly major technical advances ("breakthroughs") are less likely.

What is true of research and development applies as well to all other aspects of military policy. Attrition implies the independent pursuit of the best in general, whether in the training of armed forces, the construction of bases and facilities, or the acquisition of equipment; in relational maneuver, however, "best" solutions are sacrificed in order to emphasize the abilities that exploit the vulnerabilities and limitations of specific enemies. With neither ever present in pure form, their relative weight in the overall conduct of military policy will usually reflect national self-images in the appropriate international context.

NATIONAL STYLES IN POLICY AND WAR

Nations who see themselves as materially strong or merely rich in resources, in comparison with the threats they deem salient—a perception that may or may not reflect current realities—will generally feel free to pursue an attritional approach. Those who view