A WORKING THEORY OF OPERATIONAL ART IN MODERN WAR

A Monograph
by
Major Skip Thornton
Infantry

School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

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This paper proposes a working theory of operational art as practiced in counterinsurgency war (i.e., modern war). The underlying hypothesis of the paper is that operational art in modern war uses different logic than that used in conventional war. The inspiration for this hypothesis comes from Final Draft FM 100-20/AFM 2-XY Military Operations in Low-Intensity Conflict, 24 June 1988. This draft manual states that operational commanders use a conventional warfare type logic process when planning for LIC.
Item 19 continued:

For structure and comparison, this paper's base is built upon an analysis of the theory of operational art in conventional warfare as articulated in Professor James J. Schneider's "Theoretical Paper No. 3, The Theory of Operational Art." Since conventional operational theory enjoys broad consensus, it is convenient to use it as a familiar point of departure to introduce theoretical propositions for modern war that are qualitatively different from conventional war.

The paper proceeds from a definition of operational art in modern war. This is followed by a discussion of the linkage between the domains of war and constructive/destructive forces. Friction and fog are next discussed, followed by the ends-ways-means-risk relationship of operational planning. A section on materials will introduce the concept of centers of gravity. Schneider's analogy of the operational commander and the artistic painter helps to understand the next section entitled "the operational canvas." The final two sections will address the tools and methods available to the operational commander.
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Major Skip Thornton
Infantry

School of Advanced Military Studies
U. S. Army Command and General Staff College
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MONOGRAPH APPROVAL

Name of Student: Skip Thornton, MAJ, Infantry

Title of Monograph: A Working Theory of Operational Art in Modern War

Approved by:

[Signatures]

Monograph Director
COL John F. Hepler, MA

Director, School of Advanced Military Studies
COL L. D. Holder, MA

Director, Graduate Degree Program
Philip J. Brookes, Ph.D.

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ABSTRACT

A WORKING THEORY OF OPERATIONAL ART IN MODERN WAR by Major Skip Thornton, USA. 46 pages.

This paper proposes a working theory of operational art as practiced in counterinsurgency war (i.e., modern war). The underlying hypothesis of the paper is that operational art in modern war uses different logic than that used in conventional war. The inspiration for this hypothesis comes from Final Draft FM 100-20/AFM 2-XY Military Operations in Low-Intensity Conflict, 24 June 1988. This draft manual states that operational commanders use a conventional warfare type logic process when planning for LIC.

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INTRODUCTION

This paper proposes a working theory of operational art as practiced in counterinsurgency war. Throughout the paper I will borrow the phrase *modern war* to connote counterinsurgency war as I believe the phrase more precisely describes the continued prevalence of this form of war. The underlying hypothesis of the paper is that operational art in *modern war* uses different logic than that used in conventional war. The inspiration for this hypothesis comes from *Final Draft FM 100-20/AFM 2-XY Military Operations in Low-Intensity Conflict* (henceforth referred to as LIC doctrine):

"Long-range planning for LIC uses the same logic process commanders use in campaign planning during conventional war."

The other work that inspired this paper is entitled "Theoretical Paper No 3, The Theory of Operational Art," by James J. Schneider. Schneider's work deals only with conventional war. His purpose, as indicated in the work's introduction, is equally applicable to this paper:

"The principles and systems articulated in this chapter seek to establish the theoretical nature of operational art. Some of these principles and systems are suggested as true; others are merely hypothesized. It is for the reader to make a determination as to the validity of the theory in terms personally meaningful to him and in light of military history..."

I have taken the liberty in this paper of generally following the structure of Schneider's work. We will, therefore, proceed..."
from a definition of operational art in modern war. This will be followed by a discussion of the linkage between the domains of war and constructive/destructive forces. Next we'll take a look at friction and fog. This will be followed by a discussion of the ends-ways-means-risk relationship of operational planning. A section on materials will introduce the concept of centers of gravity. Schneider's analogy of the operational commander and the artistic painter helps to understand the next section entitled "the operational canvas." The final two sections will address the tools and methods available to the operational commander. A number of inferences will conclude the paper.

Some proposals in this paper are illuminated through historical and contemporary references. Space, however, does not allow for an in-depth elaboration of these references. They are included to point the interested reader in directions he can use either to validate or disprove the propositions.

A word about the LIC doctrinal manual. As of this writing it is not approved doctrine. It is, however, the best thing currently available. It contains some excellent information and I highly recommend it to all who are interested in the subject. I have critically extracted some material from the manual to reinforce important points. This in no way implies that I am critical of the manual as a whole. It is my hope that this paper will complement the manual by offering a degree of comprehension stimulated by a working theory.
Finally, I deal primarily with the theory of operational warfare in this paper. The interested reader can obtain a more fundamental understanding of this paper by first reading my previous work on the tactical level of modern war: "Thinking About the Tactics of Modern War: The Salvadoran Example." SAMS Monograph, 6 January 1989.

DEFINING OPERATIONAL ART IN MODERN WAR

The LIC doctrine manual does not define operational art directly but simply says the logic employed in conventional campaign planning is the same for modern war. It goes on to list a modification, of no significance, of the three questions from FM 100-5 that the operational artist must answer. A reasonable modification to the FM 100-5 definition of operational art is applicable to modern war: Operational art is the employment of civil, military, political, economic, social and psychological forces to attain strategic goals in a theater of war or theater of operations through the design, organization, and conduct of campaigns.

DOMAINS OF WAR

Professor Jim Schneider, resident theoretician at the School of Advanced Military Studies, has articulated the three domains of war as the physical, moral and cybernetic. His graphical depiction of how these domains act on combat forces, thus leading to their defeat, is at figure 1.
Figure 1. (Source: Schneider, pp. 5-6)

Figure 2.
In modern war, the domains remain valid, but the war itself is more complex. Figure 2 depicts this complexity and the difference between the destructive and constructive forces at work in modern war.

The politico-military/violence axis represents the range of ways the operational commander can conduct the counterinsurgency. The violence end of the spectrum is akin more to the conventional way the US fought the Vietnam war. It is essentially the military solution. The politico-military end is approached by LIC doctrine's internal defense and development (IDAD) concept:

"The IDAD concept integrates military and civilian programs... (It) focuses on building viable political, economic, military, and social institutions that respond to the needs of society... The successful counterinsurgent must realize that the true nature of the threat to his government lies in the insurgent's political strength, not in his military power. Although the government must contain the insurgent's armed elements, concentration on the military aspect of the threat does not address the real danger."

The time axis in figure 2 reflects the fact that the commonly heard adage "time is on the side of the insurgent" is not necessarily true. LIC Doctrine also addresses this issue:

"Gaining time, or surviving, is a more effective measure of success for the insurgent than counting battles won or lost. It is an equally effective measure of success for the counterinsurgent. However, gaining time by itself will not produce victory, although it is a necessary condition for it."

Clausewitz writes of the importance of time for both
antagonists: "Time lost is always a disadvantage that is bound in some way to weaken him who loses it."

The casualty axis represents both physical and moral casualties. A moral casualty is a person or group that morally supports your opponent. It assumes a zero-sum game. The more casualties one side has, the less political and popular support is available to that side. The importance of casualties can be decisive beyond a certain point, represented by the force correlation threshold dotted line.

Jeffrey Race has modeled the relationship between the different population sets in Long An, Vietnam in 1967. His model, which I believe has general application to the social forces at work in modern war, will be used to explain the casualty and support axes, and the force correlation threshold dotted line in figure 2.

Race defines five population sets. First, the enemy population willing to assume high risk, such as cadre and guerrillas: EPp. Second, the low risk population set, living normal lives, but sympathizing with, and providing materiel and intelligence support to the enemy insurgent, EPs: or, third, to the government, FPg. Fourth, the high risk population set serving the government, physically and morally, in an official capacity such as soldiers, police or government officials: FPh. The final population set is the neutrals: Pn.

The combination of these population sets represent force to
where \( r \), is some function, \( g \), of the population sets. The correlation of forces can now be depicted as the ratio of the functions.

\[
\frac{f_r}{f_0} = \frac{g(FP_r, FP_0)}{g(EP_r, EP_0)}
\]

The relationship Race has articulated through these depictions (that I have slightly modified) is fundamental to understanding WAYS and MEANS available to the operational commander. Essentially, Race argues that force can and must be created if victory is to be achieved. In modern war, force can be created by garnering support through persuasion, accomplished through the use of a combination of political, psychological, economic, social and military tools available to the operational commander.

The successful operational commander uses his tools to organize, mobilize, coalesce and motivate members and groups from the five population sets. When a sufficient number of the country's population backs one side to the point where the other is no longer able to obtain significant moral and materiel support, then victory is achieved. This is represented in the graph at figure 2 by the vertical force correlation threshold.
dotted line.

The other line on the graph depicts the domains at work on the defeated side. It is instructive to note that this line contains a sequence different than the sequence on the line of Schneider's graph. In conventional warfare, disorganization usually occurs before disintegration. Schneider observes that armies are known to have continued to fight effectively even though their man-made C3 structure has been destroyed or interdicted. Theory attributes this capability to morale, which is viewed as the degree of will within the army. Schneider concludes that "will is the engine of all action... Fear contributes most to the corrosion of will."* This dynamic is not the same in modern war. Vietnam is the classic example. The C3 structure never became operationally disorganized. Yet the lack of will to continue was decisive, especially at the strategic and tactical levels. Political will is considered on the right vertical axis on figure 2. Failure to maintain US political will contributed to defeat in Vietnam. It also contributed to the defeat of the French in Algeria. Political (strategic) and tactical will is mostly a function, in modern war, of popular support. It follows that popular support, as manifested through strategic and tactical will, has a direct effect on the ability of the operational commander to attain his ENDS. Therefore, popular and political support must always be considered as operational MEANS.
This brings us to another difference in will between conventional and modern war. Schneider writes that victory in conventional war is achieved by imposing our will upon the enemy. However, the lessons of Vietnam are clear. An operational focus on the enemy, as manifested by EPn, in Race’s model and as practiced by US forces in Vietnam will likely lead to failure. The operational commander, using his operational tools, must impose his will, not on the enemy, but upon the population in a manner to persuade them to support the government’s policies. Popular support sustains the political will necessary to buy the time for the operational commander to shift the correlation of forces towards victory.

(NOTE: The graph at figure 2 contains an anomaly in the relationship of the WAYS axis to the political/popular support axis. There is no relationship between the increase of violence and the increase of political/popular support. These two axes of the graph merely point out that there are a range of WAYS open to the operational commander and that those selected will have an impact on the degree of political/popular support attained.)

FRICITION AND FOG

Schneider writes that friction is Murphy’s Law. It wastes combat power. As such, it must be taken into account by the operational commander in the form of risk and/or increased allocation of resources to cover the anticipated loss. Fog is reality undetected or misconstrued. Both fog and friction are
ever present elements of conventional and modern war.

Regardless of situation-specific forms of friction, there are five prevalent forms, exacerbated by fog, which are operationally significant in modern war. They are human rights violations, corruption, the media, organization and combinations. That these forms are operationally significant is easily demonstrated.

Human Rights Violations: Just a year ago the picture on the nightly news showing the effects of Israeli soldiers beating and breaking bones of Palestinian civilians caused an uproar sufficient to cause the Israeli operational commanders and political leaders serious embarrassment. This WAY the Israeli's chose to deal with the Palestinian problem was proved to be counterproductive and had to be changed. It was clearly perceived as human rights violations that neither their own soldiers nor the rest of the democratic world would support. The result of their WAY was a loss in the zero sum game.

It is instructive to note that the British were more sensitive to the human rights issue in Malaya. In fighting that counterinsurgency they passed a special law in 1948 known as the Emergency Regulations. Among other things, it legalized arrest and detention without trial. This could easily have been abused and to ensure its just implementation they formed a Public Review Board. The Board consisted of independent citizens who openly reviewed each case and heard appeals. Here is an example of an operational method to deal with the debilitating effects of
potential human rights violations.

**Corruption:** We need look no farther than our own backyard to discover the debilitating effects of perceived corruption on the Contras. The Nicaraguans, counterinsurgents in this case, have achieved a victory over the Contras that is due, in part, to the perceived corrupt practices of Oliver North and his network. This is not meant as a value judgment as to the legality of North's actions. The point is that North's perceived corruption was operationally significant for the Contras and Nicaraguans, and it is only operational significance that need be demonstrated here.

Examples of government officials perceived to be corrupt abound in the literature of *modern war*. Citizen's perceptions of corruption by governmental agents cannot be beneficial to an operational concept that is attempting to persuade these same citizens to support the government's policies.

**The Media:** The debilitating effects of civil rights violations and corruption are intensified to some unpredictable degree by the modern day phenomena of the media. Irresponsible journalism and media manipulation further exacerbate the fog of *modern war*. It is self evident from our Vietnam experience that the media is a source of friction and fog.

**Organization:** The organization through which the operational commander wields his tools will be a source of friction. This is also a problem in conventional warfare. The modifications
operational commanders had to make to LTG Lesley McNair's triangular divisions in World War II is a case in point. This problem in modern war, however, is much greater because we, the US, have no successful experience to go on, nor do we adequately train or educate ourselves for this kind of warfare. Also, any joint organization will suffer from inter-agency rivalry. Compounded on top of this is the fact that agencies will be operating in the area who have no responsibility to the operational commander. There will be duplication of effort, poor information flow, and a sense of frustration about 'the right hand not knowing what the left hand is doing.'

**Combinations:** There are a number of different social, political, economic and paramilitary organizations from which the operational commander would need to garner support if he is to be successful. Each organization is likely to have different causal or value orientations. Therefore, the operational methods selected by the commander are likely to affect each group differently (and not necessarily in a positive manner). The operational commander's dilemma is to select the right combination of WAYS so that he reaps the maximum support possible consistent with his aim. Discovering the right balance, or combination, is another source of friction as resources are not used efficiently while the commander experiments with different combinations. The unsuccessful attempt to establish agrovilles in Vietnam illustrates this point.
Why is friction, exacerbated by fog, such an important concept for the operational commander to understand? Clausewitz provides an answer:

"An understanding of friction is a large part of that much-admired sense of warfare which a good general is supposed to possess... The good general must know friction in order to overcome it whenever possible, and in order not to expect a standard of achievement in his operations which this very friction makes impossible... Practice and experience dictate the answers: 'this is possible, that is not'.”

OPERATIONAL PLANNING

Fundamental to understanding how to plan operationally is understanding the relationship among means, ways, ends and risk. Schneider writes that operational art includes a process that chooses methods -- the ways -- which govern the application and utilization of resources -- the means -- to attain the desired end. Feasibility, suitability and acceptability criteria must be applied during the process.

"The selection of the end implies the clear and complete visualization of an end-state toward which all military action is directed... In warfare this may be the single most important decision a commander can make.

"A military end is feasible if the means available can support the attainment of that end.

"An end is considered suitable... when its attainment will bring about a useful effect... Therefore an operational end is considered suitable only to the extent that its effect or outcome contributes to the attainment of the strategic end."
"The final criteria for assessing an aim and a method concerns the issue of the acceptability of the consequences of defeat... Victory and defeat can be considered meaningful only in terms of the accomplishment of the ultimate aim.

"Considerations regarding the consequences of defeat lead to the assessment of risk. In instances when the means do not support the ends, as is often the case, the careful selection of appropriate operational methods can offset some of (the resource) shortfall... Where we have a shortfall... that cannot be offset by method, we will encounter a certain amount of friction. Risk is a measure of that friction...

The operational commander's planning is likely to be constrained by political authorities. The effect of constraints is to limit the number of ways available to employ the means. For example, the FMLN insurgents in El Salvador receive some materiel and moral support from refugee camps located on the Honduran side of the Honduras-El Salvador border. Operational commanders, however, are constrained because they cannot cross the border and enter these camps to apprehend insurgent supporters.

While strategic constraints such as these are common to all forms of warfare, there is in modern war a unique form of constraint. Operational planning will be constrained by the perceived effect its execution will have on certain population groups. The phenomena of liberation theology occurring in El Salvador today illustrates this point. Christian Base Communities are organized by the Catholic Church to commit
village peasants to work together to improve their communities and to achieve a more just society. In many cases commanders see these organizations as a leftist threat and they act to repress them. This causes peasants to take more radical positions against the government, a condition ripe for exploitation by the insurgent. The theoretical point to be made assumes that the government could benefit from the support of this peasant group, because of the zero sum nature of modern war. The operational commander, then, must select ways that will not alienate this group. Repression may not be a suitable way. He is, therefore, constrained by what he perceives the target group will not tolerate.

THE MATERIALS

Operational theory of conventional warfare suggests that "logistics is the final arbiter of operations... [and that logistical lines of support] must be maintained at all costs" because, if LOCs are severed, the force will wither away. Many who have studied the operational level of war believe creating and sustaining the logistical conditions for battles is the essence of operational art. But the commander in modern war must view logistics in an entirely different light than his conventional counterpart.

LIC Doctrine begins to broach this issue as follows:

"The insurgent's use of logistics highlights one of the key differences between counterinsurgency military operations and those in conventional war. The insurgent gets
the majority of his logistical support from the population -- as a result of his mobilization efforts. Thus, when he is successful, he advances toward his source of support; as he advances, he shortens his LOCs rather than extends them as is normally the case. It is better for the counterinsurgent to mobilize the people against the insurgent than to try to deny him logistical support by coercive means. This is because the insurgent's LOC is not a supply route in the literal sense. It is the friendly political environment which enables him to draw logistical support from the people."^{20}

Certainly this statement has its rightful place in theory. However, the experience of the Contras, FMLN in El Salvador and the Mujahideen in Afghanistan confirms that insurgents can obtain significant support from external sources and must use roads and trails to move this support into the target country. Therefore, theory must recognize that insurgents sometimes are shackled by LOCs that represent both a lifeline and a vulnerability for them.

The operational commander in modern war must view his own logistical considerations in a two dimensional form. First, there is the need to provide his organization with food, clothing, medical and maintenance support. These are primarily tactical requirements and will not consume a preponderance of the operational commander's time. Because of the nature of modern war, selection and protection of LOCs to move this support is not operationally significant. Second, soliciting political support to implement and maintain operational concepts will require a major, continuing effort.
Without political support the commander's ability to implement and maintain combinations of civil affairs projects, PSYOPS, intelligence, health services support and support for certain population groups will be short lived. There is a mosaic of combinations that the operational commander must weave together to produce the synergistic effect he visualizes will achieve his end state. Inevitably the mosaic will have to be changed because of friction and insurgent reactions. Also, politicians, the media, special interest groups and others will think they know best which combinations should be included in the mosaic. The commander's vision, his operational concept, will have to face terrific scrutiny and opposition.

It will take much of the commander's persuasive powers and demonstrated determination to achieve the political support to sustain his concept. Political support is the operational center of gravity in counterinsurgency. Lose this support and the effect in the theater of operations will be decisive. This is true even though there may be considerable popular support for operational concepts. There is an apparent paradox here as we frequently hear the phrase that this form of war is for the 'hearts and minds' of the people. And this is true at the tactical level. But the French experience in Algeria confirms that an operational focus only on popular support was inappropriate. General De Gaulle withdrew his support in 1961, thus causing the war to end unsuccessfully for the French.
paradox is resolved, however, through an understanding that both political and popular support must be nurtured and sustained by the operational concept, but never one to the exclusion of the other.

The manifestation of political support comes in the form of funding for the operational concept. There is the likelihood that funding will only be provided partially or that some operational tools desired to be used by the commander will not be funded at all. For example, a required funding level of $1 million/day may only be funded to $.8 million/day; or funding support for PSYOPs may be withdrawn completely. Neither of these constraints may be war terminators, but they do represent some degree of risk. The operational commander must articulate the risk, persuade others that the risk is either acceptable or unacceptable, and if unacceptable, persuade supporters that the desired political end state must be modified to match the funding means now authorized. Depending on the frequency of the formal process to obtain funding support (each fiscal year in the US for example), it is apparent that much of the operational commander's time will be consumed in this effort.

THE OPERATIONAL CANVAS

Schneider uses the analogy of the commander practicing operational art like an artist using brushes, paints, thinners, canvas and time to create a beautiful oil painting. "The operational idea achieves its fullest expression when it is
'painted' upon the theater of operations." He explains the composition of the operational canvas to be decisive and objective points, terrain, the centers of gravity, the central position and line of operations, and theaters of interest. This section addresses the operational canvas of modern war. Schneider defines decisive and objective points and the three forms. These are applicable to operational art in modern war. "A decisive point is any objective that will provide a force with marked advantage over his opponent... There are three kinds of decisive points: physical, cybernetic and moral. Physical decisive points are the most well known. These may include key hills, bases of operations, ridges, bridges, towns, a formation or anything that is physically tangible and are extensions of the terrain, whether geological or manmade. Cybernetic decisive points are those which sustain command, control, communications and the processing of information. A cybernetic decisive point might be a communications node, a boundary, a CP, an RPV, commander, staff group, etc. As the name implies, cybernetic decisive points are invariably manmade. The third type of decisive point is a moral decisive point. These sustain the forces' moral... their magnitude of will... A comma, or seldom has the means to seize or retain all decisive points in his theater. He must weigh the risks against the benefits associated with each. Those decisive points which he ultimately decides to retain or seize are called objective points. Objective points are simply a subset of all the decisive points in a theater." Terrain, overlaid with the economic infrastructure, does have operational significance in modern war. Police, paramilitary, and military forces can be soaked up in large quantities.
protecting the infrastructure, including such things as bridges and electrical grids. Also, rugged terrain offers refuge to insurgent military units, and is therefore a medium for small scale tactical military operations. But terrain, hence physical decisive points, is not the dominant consideration that it is in conventional operations. In its stead the operational commander is more concerned with the population.

Whereas in conventional operations we have key terrain, the possession of which offers a marked advantage over the enemy; in modern war, we have key political, social, economic and military/paramilitary/police groups and organizations, the support of which offers a marked advantage over the insurgent. The Malayan Emergency demonstrates this fact.

There were three broad population groups in Malaya: the Chinese (from which the insurgents came) (38%), the ethnic Malays (49%) and the Indians (12%). Neither side could win without the support of both the ethnic Malays and the Chinese. Since the Malays were firmly on the side of the government, the struggle was essentially for the control of the Chinese, and finally the Indians. It was through the Chinese that the insurgent Malayan Races' Liberation Army (MRLA) obtained their moral and physical support. The British resettled the Chinese into New Villages (i.e., strategic hamlets), to sever the support provided to the insurgents. This effectively doomed the insurgents. Control of the Chinese population set was decisive.
An example of an organization within a population set which is meant to be decisive can be found in the current counterinsurgency in the Philippines. An alliance of a number of pro-government groups is known as the National Alliance for Democracy (NAD).

"The membership, which includes armed vigilantes, was told by Defense Secretary Fidel Ramos to 'hold' the nation's villages against communist guerrillas.

"Bolstering such a civilian force is part of the military's shift away from gun battles with insurgents to political warfare, thus mirroring communist tactics. Mr. Ramos enlisted NAD to roll back popular support for the Communist Party of the Philippines.

"Ramos described the relationship between the military and NAD as 'synergistic.'"

Obtaining support from or control of groups and organizations such as these is equivalent to seizing moral decisive points in conventional operational theory. Henceforth, these groups and organizations will be known as decisive groups.

There are also cybernetic decisive points in modern war. Again, the Malayan Emergency illuminates this proposal. The British successfully discovered and exploited the MRLA's sole means of operational communications: a jungle letter drop system. Doing so allowed them to control the amount and type of orders/information being received by local activists and led the British to insurgent jungle camps. It directly led to the British ability to disrupt and attrite the insurgent operational
leadership operating in jungle refuge areas.

Campaigns in modern war are designed to achieve control or support of decisive groups and decisive points. The commander will design his campaign with the intent of destroying his enemy’s center of gravity, via decisive groups and points.

Schneider writes:

"The FM 100-5 notes the 'concept of centers of gravity is the key to all operational design.' Indeed it may be the key design concept at all levels of military art. Thus the first step in the design of any campaign or major operational plan is to identify the enemy’s center of gravity—his main effort. Having made this initial identification the commander must now determine how best to disarticulate, shatter or destroy that center of gravity while maintaining coherence and cohesion of his own."[27]

The concept of centers of gravity is valid for modern war. The idea that political support, manifested by funding, is the operational center of gravity has already been proposed. The insurgent operational center of gravity is one of two possibilities or a combination of both. If the insurgent means for continuing the war is externally provided, then eliminating this external support will eliminate the insurgents. The example of the Contras illustrates this proposition. If the insurgent draws his support from the populace, then the insurgent-populace link must be severed. The Malayan Emergency exemplifies this proposition. If the insurgent draws his support from both internal and external sources so that the elimination of just one
will not produce victory, then the combination must be eliminated. The Salvadoran FMLN are in this category. I proposed in my tactical monograph that the tactical center of gravity is shared by both the counterinsurgent and insurgent. It is the local populace. The populace is geographically bound by the theoretical concept known as theaters of interest.

The concept of theaters of interest in any conflict is significant for two reasons. First, it provides perspective, allowing us to grasp the situation intellectually and practically, and divide the labor. Second, hierarchical organizations are structured to provide analysis, guidance, orders and supervision based on particular perspective. Conceptual understanding of theaters of interest leads to fixing responsibility for a particular perspective to a particular organization. In NATO, for example, Schneider has linked responsibility for operational art, in part, to CENTAG and the US Corps who conduct operations along operational axes and zones of operations, respectively; for the purpose of attaining major campaign goals. In conventional warfare, therefore, the fundamental linkage associated with theaters of interest is force-terrain-mission. This linkage, however, is incomplete when applied to modern war.

In conventional warfare terrain is important for its own sake. In modern war terrain's principal importance is due to the population groups that live and work on it. This is true because
a major purpose of the war is to obtain the support of these population groups to the advantage of one side and at the expense of the other side. Terrain does have significance for its own sake in some aspects of modern war, such as the transportation and power grids, but it does not hold the dominance in this form of war as it does in conventional war. Therefore, the fundamental linkage associated with theaters of interest in modern war is force-political/popular support-terrain-mission.

The subordination of terrain to population groups makes such conventional components of theaters of interest as operational axes, lines of operations and zones of operations largely irrelevant. Conventional operational theory requires that terrain be organized to provide space for large forces to move and deploy as well as to construct a sophisticated logistical infrastructure linking these large forces to their base of support. No such operational requirement prevails in modern war, hence another operational design for theaters of interest must be theorized.

Along with sustaining political support, obtaining the support of population groups through persuasion is central to achieving victory in modern war. Earlier the five population groups identified by Race were introduced. Another way to define population groups is by the values or causes a group of people have in common. Examples are the anti-abortion groups or the National Rifle Association. The requirement to influence
population groups within a geopolitical boundary, such as the Midwest United States, is the essence of operational design in modern war. A geopolitical area is known by its conventional name of theater of operations. Its purpose is to bound the area where resources will be applied in accordance with a campaign plan to achieve one or more major goals of the theater of war, or strategic, plan. The theater of war is the nation-state experiencing the insurgency. Its boundaries may be expanded to include terrain in other neighboring countries providing sanctuary to the insurgents even though the operational commander may be constrained from physically entering the sanctuary. In many third world countries, the theater of war and theater of operations are likely to be synonymous. Operational art is practiced in a theater of operations, governed by ideas of operations meant to persuade one or more groups to support the government's policies.

An historical example of ideas of operations comes from the Malayan Emergency. General Sir Harold Briggs was appointed in 1950 as Director of Operations for Malaya. He is remembered for his Briggs Plan which resettled over 400,000 squatters into New Villages. This operational concept stemmed, however, from ideas of operations:

"He aimed not only to resettle the squatters but to give them a standard of local government and a degree of prosperity that they would not wish to exchange for the barren austerity of life under the Communists' parallel hierarchy; in other words, to give
them something to lose."^30

Other examples of the ideas of operations can be found with the French in Algeria: anti-communism^31; and the Vietminh in Vietnam, 1945-1954: anti-imperialism and anti-feudalism.^32 A contemporary example of an idea of operations is reported from the Philippines. Here the idea is also anti-communism. Using this idea, resources are being applied to employ the support of the National Alliance for Democracy (NAD) introduced earlier in this paper. This umbrella organization consists of a number of causal and value groups such as Alsa Masa, Red-Alert Christian Ministry, Catholic Action to Love the Communists, and People's Alliance against Communism.^33 The theoretical significance of these groups is embodied in the concept of decisive groups earlier introduced. The Philippine example also illuminates the fact that there will likely be more than one idea of operations in a theater of operations. The government has taken action to stop environmental decline by banning timber exports; hence another idea of operations may stem from a pro-environmentalism policy. Powerful groups line up on each side of this issue and it has the potential to add fuel to the fires of insurgency.^34

It would be a mistake to think of ideas of operations as another phrase meaning the concept of operations. For example, the French counterinsurgent doctrine available during their Algerian war contained such concepts as tache d'huile (oil spot technique or methodical, slow expansion of French control):
bouclage (large scale encirclement); and ratissage (broad front sweeps through suspected guerrilla refugee areas). These concepts are more akin to what we think of as concepts of operations. But they do not adequately explain the dynamic at work in modern war.

Ideas of operations does explain the inseparable psycho-social dynamic of modern war. It acknowledges that the operational concept will have a psychological impact on the population, whether intended or not. Ideas of operations further offers the link between political policies and the psycho-social impact of the operational concept on political support and the populace. It also gives coherence, direction and purpose to the operational organization administering the operational concept.

THE TOOLS

Tools available to the operational commander to perform his artistic handiwork over the canvas of modern war include his organization, time, attack, defense and civil-military resources.

Organization: LIC Doctrine does an excellent job of laying out a model for operational organization and I will not belabor the point here. Suffice to say that it is a joint civil-military organization with clear command authority provided to the operational commander to ensure unity of effort. The addition to the doctrine of the concept of operational design so that it is clear which organization has responsibility for which perspective will improve the manual's clarity. It is especially important to
add ideas of operations as this concept is crucial in modern war where, by its nature, it is essentially a war of ideas. The concept of ideas of operations will provide coherence, direction and purpose to the organization proposed in the doctrine. The side which is better organized from the strategic level through to the tactical level in modern war will have victory in its grasp. The operational commander will expend a significant amount of his time ensuring his and his subordinate organizations are properly designed to effectively influence the decisive groups.

**Time:** Time must be thought of in two ways in modern war. First, in conventional operational theory there is the concept of operational pauses. For example, there may be an operational pause to move logistics and additional combat forces forward in preparation for the next phase of the campaign. In modern war the operational pause will appear when new ideas of operations are being formulated. This is the situation in El Salvador presently, resulting from the presidential elections in March, 1989. Operational pauses become operations to gain time. The operational commander will not win the war during these pauses, but neither does he want to lose it while awaiting for political authorities to articulate policies from which ideas of operations will be derived. Another reason for an operational pause will be to reconstruct or reorganize the operational or tactical organization because it simply is not working or because it has
been damaged by enemy activity. This phenomena is reported by Race in his study on Long An Province, Vietnam. There will be a number of other reasons for operational pauses and the operational commander must be able to recognize them for what they are. The second way which time in modern war differs from conventional warfare is the tempo of operations.

The conduct of modern war takes patience. This fact is intuitively obvious to those familiar with the nature of this form of warfare, but patience is not a virtue in Western society. Rather, we want quick and dramatic results and crave events that fit into sound bites on the nightly news. Therefore, a major part of the operational commander's campaign to protect his center of gravity, political support, is to cultivate patience among those who provide support for his funding.

**Attack and Defense:** Attack and defense are valid concepts in modern war. In conventional warfare, one attacks to seize a decisive point and defends to retain a decisive point. This is also applicable in modern war when, for example, transportation or power grids must be defended or when insurgent military formations become the object of operations. In modern war, however, one attacks primarily to persuade decisive groups to support the government's policies. One defends primarily to retain the support of decisive groups. Here lies a qualitative difference between conventional and modern war. In conventional war, operations of the defender and attacker are designed to
exhaust or annihilate the opponent. Destruction is the focus of conventional operations.

In modern war, as earlier introduced by Race's population groups which represent forces, destruction of the insurgent is not the focus. The focus is generation of force through the persuasion of population groups to support the government's policies. The concept of force generation is only understood within the framework that all citizens within the theater of operations enter into the equation for force correlation. Modern war is a zero sum game. Citizens, and consequently the groups to which they belong, who are persuaded to support the government's policies do not support the insurgent, and they must be defended. The attack in modern war then is to conduct operations to persuade groups who are neutral or who support the insurgent to shift their allegiance to the government. Conventional attack and defense are manifested by battles and engagements. These manifestations, however, are inconsistent with the nature of modern war.

It is necessary to introduce a new term here because "engagement" does not adequately describe the dynamics of tactical actions in modern war. An entanglement is defined as any action, reaction or inaction by a governmental agency or representative, or its insurgent counterpart, that has potential persuasive effects on itself, its supporters, its enemies, or the neutral population. The potential persuasive effects could be
either positive or negative.

I have chosen the word entanglement because its English language definition reflects the continuously involved, complicated and intricate relationship between the populace and the tactics, techniques and procedures of modern war. Entanglements represent the reality that the elements of war are continuously entwined in this form of warfare: military, government, insurgent, civil populace, media and time. Entanglements acknowledge that engagements, in the conventional sense, take on an added dimension in modern war: that all military/paramilitary/police activity has an inseparable psychological effect on the local population. Entanglements further represent the presence of tactical civil-military operations (CMO).

Civil-Military Operations: LIC Doctrine states that CMO is the linchpin of the military's role in the nation building tasks of modern war. CMO tasks can have a significant persuasive effect on the local populace. Other governmental agencies also perform tasks directly impacting on the local populace. As such, their operations fall into the definition of entanglements. For example, a government may have an agency similar to the US Agency for International Development which goes into a village and builds a well that improves the population's water supply. This tactical act has potential persuasive power and is an entanglement.
Failure to think in these terms can lead to the counterproductive situation in which Israel found itself in the Spring of 1988 when it officially sanctioned beatings of West Bank Palestinians by the Israeli military.3

Just as conventional battle consists of simultaneous or sequential engagements, so consolidation operations in modern war consist of simultaneous or sequential entanglements. LIC doctrine characterizes the consolidation operation as four overlapping stages.

"During the preparation stage, civil and military forces plan, train, organize, and equip for operations..."

"In the offensive stage the security force's first goal is to clear the area of insurgent tactical units. After this, adequate government forces, including available police and paramilitary personnel, stay in the area to protect the population from remaining insurgent elements..."

"During the development stage, civil and military forces shift (emphasis) from offensive action to national development. The armed and paramilitary forces adopt an aggressive defensive posture to protect the secured areas established during the offensive stage. This permits other (task force) elements -- the political, economic, social, and psychological action cadres -- to conduct their activities effectively. Informational and psychological activities continuously motivate the population to support all governmental efforts..."

"The completion stage involves the speedup and expansion of development programs and the enhanced ability of local authorities to defend against insurgent attacks. The government begins efforts to return all responsibility for local government to local authorities. Task forces gradually release unneeded armed forces and development cadre elements."3

32
Operational design combined with an understanding of tactical entanglements and consolidation operations allows for a comprehensive description of the operational level of modern war. The essence of operational art is deciding the ends, ways, means and time to conduct simultaneous or sequential entanglements and consolidation operations, within a theater of operations, to protect or persuade decisive groups and sustain political support in concert with ideas of operations. The plan for doing this is the campaign plan and it will invariably include the need to protect the physical infrastructure in the theater of operations, such as the transportation and power grids. But is operational art truly an art form?

METHOD

The artistic element of operational art derives from the operational commander's sensing of the most favorable combination of means, ways and ideas of operations to achieve the desired end. The number of possible combinations is staggering. For example, consider that the operational commander decides to form two task forces to operate in the theater of operations.

Each task force, if resourced, could perform up to six tasks: 1) visible presence, 2) routine governmental functions, 3) social (medical, population and resource control, social organization), 4) economic (developmental projects), 5) military (security, intelligence, destruction of insurgent infrastructure), 6) psychological (PSYOPS programs). Each task force could
theoretically perform 35 different combinations of the six tasks. The two task forces combined could perform $35^2$, or 1225 combinations. The mission of each task force will be linked by the ideas of operations.

Let's say, for example, that the intent of the two task forces' consolidation operations is to obtain the support of a decisive group known as liberal democrats. These liberal democrats are pro-capitalists, anti-fascists, and opposed to US bases in their country (this group really does exist in the Philippines). The operational commander must articulate ideas of operations linked to national political policies and based on the multiple cause orientation of this decisive group if he expects to obtain their support. It is easy to imagine that a combination of ideas of operations will be required here.

For example, to address anti-fascism the commander might say: Task Forces A and B will conduct consolidation operations to guarantee the security and function of good local government in your respective areas. You will ensure fair campaigning and balloting in the upcoming mayoral and village council elections. To address pro-capitalism, he adds: Task Forces A and B will supervise the government's land redistribution program and ensure its fair implementation. Economic development programs will be contracted out to local business when possible. Corrupt officials and businesses will not be tolerated. The free market concept is to be encouraged. To address anti-basing he
articulates the need for PSYOPS: Task Forces A and B will actively disseminate the government's position on US bases in our country. It will emphasize our intent to negotiate a treaty with the US that emphasizes our sovereignty.

The operational commander will want the persuasive effect of both task forces' operations to be greater than their sum. Synchronization and synergism apply in modern war the same as they do in conventional warfare. It is clear that no mechanical process can arrive at the correct combinations and timing to achieve the intended operational effect.

Selecting the right combination of tasks, skilfully articulating ideas of operations and then translating all this into apportioned resources requires the genius of the artist. Combine this to the need to time the employment of the task forces to achieve the greatest effect and you can see why not just any man can fulfill the role of operational commander. The development of branches and sequels to the operational plan, however, helps in mitigating the results of incorrect selection of tasks and time. Just as in conventional warfare, planning for different combinations of means, ways and ideas of operations likely to achieve the intended END is prudent. If indicators are not present to reflect that the plan is achieving success, then a branch to the plan employing different combinations will be available for consideration.
CONCLUSIONS

I have used the phrase operational commander many times throughout the paper and now it is time to conclude whether this should be a military man or a civilian. The historical evidence of the French in Algeria and the US in Vietnam would tend to suggest a civilian commander. The French in Algeria were essentially at loose ends because there was no political control. When De Gaulle attempted to establish political control, many key French officers opted for insurrection. In Vietnam, the military solution prevailed at the expense of a more balanced civil-military solution, possibly because Westmoreland, a military man, was calling many of the shots with an emphasis on security and attrition.

The British experience in Malaya, however, serves to mitigate the above. There, General Sir Gerald Templer achieved tremendous success in the combined role of High Commissioner and Supreme Commander. The conclusion, therefore, as to who best fits the role of operational commander, in theory, must be that it can be either a military officer or civilian. In the end victory is not a function of which type of person fulfills the role of operational commander, but whether he selects operational concepts that are aligned with the objective reality of the specific conflict.

A major step in formulating and sustaining operational concepts is protecting the operational center of gravity.
political support as manifested by appropriate funding. Translating political policy into sequential and simultaneous ideas of operations provides the link between the operational and tactical centers of gravity. It may appear that the operational commander is being pulled in opposite directions by disparate operational and tactical centers of gravity. If this were true, it would be just as damaging as having a military commander defend or attack in two different directions. However, this is not the case as long as the ideas of operations have the intended persuasive effect on decisive groups because political support feeds off of popular support. Popular support linked to ideas of operations ensures the thread of continuity that should be sufficient to sustain political policy. However, when reality is interjected, there will be factors other than popular support, or lack of it, that drive political policy, hence affect the operational concept.

These other factors mandate that the operational commander in modern war play a part in the process of formulating political policy. He must not make policy, for this would approach the unsuccessful Algerian extreme; but he must be more than just a trumpet of counterinsurgent techniques in the Cabinet, as Clausewitz would suggest is the role of the conventional operational commander.46

That the proposition of a politico-military operational commander is valid is evinced by Templer’s political influence in
Malaya. The British Government had decided that Malaya would eventually become independent. It was Templer's influence, however, that led to the timing of the independence:

"Templer was, however, impatient with the idea of 'independence before breakfast.' He realized that, for the people in the villages, self-government was less important than good government. He was determined to bring self-government to Malaya, but not until the independent government could be strong enough to prevent racial violence (as had occurred in India) and the people were no longer in a state of insecurity and poverty. The tragedy of the Congo has proved how right he was."

The operational commander's politico-military role is also consistent with his need to protect his center of gravity. The commander will use his access to policy makers, on an equal basis, to ensure their understanding of his operational concept. He will also have the opportunity to analyze possible policies as they are being formulated and apply the feasibility, suitability and acceptability criteria. In summary, the concept of the politico-military operational commander helps to obtain and maintain unity of effort and singleness of purpose from the policy makers through to the tactical entanglements. Ideas of operations provide the thread of continuity.

In conclusion, it is instructive to infer a list of the operational functions that are performed in modern war. Operational functions are defined as those functions that are uniquely performed by the operational level commander and his organization. Here, I am talking about those functions that are
prominent, like their conventional counterparts: operational intelligence, operational logistics, operational fires, operational maneuver, and operational deception.

The functions already described in the paper include operational politics (e.g. Templer in Malaya); operational ideas (i.e., ideas of operations); operational sustainment (i.e., the obtainment and sustainment of political support for funding); operational intelligence (e.g. identification and designation of decisive groups; and identification/collection/analysis of indicators of the success of operational concepts); and operational organizing (i.e., consistent with the adage that the side which is better organized from the top through the bottom has victory in its grasp). There are also some functions that I have not elaborated sufficiently in the text.

There are examples in the literature of entanglements between the operational commander a population group that resulted in effects with operational significance. We shall call this function personal operational mobilization.

Initiative is defined in FM 100-5 as setting or changing the terms of battle. There are aspects of initiative that only the operational commander can affect. Deciding to conduct simultaneous or sequential consolidation operations fits the definition of initiative. An important example of operational initiative that I have failed to address is the likely need to introduce emergency legislation that facilitates the conduct of
the operational concept. In Malaya, these were known as Emergency Regulations and they ran to 149 pages in length. Their significance included population registration and arrest and detention without trial.\textsuperscript{43}

There are certainly other operational functions that are specific to a given situation. These listed have general applicability.

In this monograph I have attempted to introduce the outline of a theory of counterinsurgency that is useful in helping understand LIC doctrine. It is clear that operational art in modern war must be thought of in a framework that differs from conventional conflict. There are many propositions in this paper that need to be validated or dismissed through historical and contemporary studies. There is much work that needs to be done in the field of modern war because many of us, and many of our children, will likely find ourselves involved in this form of warfare and having to deal with the issues raised herein.

It is sobering to think that, by 2010, the population of Mexico will increase 38\%, that 52\% of their population will be less than 24 years old, and that 77\% will live in urban areas. Will the problems in Mexico affect us in the US? Will we be called upon to assist Mexico, or perhaps the Mexican insurgents? Will we assist others in Latin America and elsewhere in the Third
World as the century turns and 81% of the world's population resides in these 'have not' countries? Insurgencies are not going to go away and we must prepare ourselves!

FINALE

"Theory exists so that one need not start afresh each time sorting out the material and plowing through it, but will find it ready to hand and in good order. It is meant to educate the mind or the future commander, or, more accurately, to guide him in his self-education, not to accompany him to the battlefield..." (Clausewitz, p. 141.)
ENDNOTES


5. Schneider, pp. 6-7.


7. Ibid., p. 2-10.


10. Schneider, p. 7.

11. Schneider, p. 5.

12. Ibid., p. 7.


15. For an example, see Race, pp. 46-48.

16. Clausewitz, p. 120.


22. For a good explanation of the dynamic of political and popular support see Peter Paret, *French Revolutionary Warfare From Indochina to Algeria*, (New York, 1984).


27. Schneider, p. 27.


29. Schneider, pp. 31-33.

30. Clutterbuck, pp. 56-57.

31. Paret, p. 25.

32. Race, p. 40.

33. Jones, p. 4.


35. LIC Doctrine, pp. 2-19 - 2-23.

36. Race, p. 110.

37. Schneider, p. 35.


40. Clausewitz, P. 608. The editors of *On War* clarify their
interpretation of Clausewitz's meaning of the relationship of the commander-in-chief and the cabinet: "By writing that the commander-in-chief must become a member of the cabinet so that the cabinet can share in the major aspects of his activities, Clausewitz emphasizes the cabinet's participation in military decisions, not the soldier's participation in political decisions."

41. Clutterbuck, p. 81.

42. See, for example, Clutterbuck, pp. 81-83.

43. Clutterbuck, pp. 37-38.

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