Thoughts On
The Operational Art

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Introduction

How best to translate strategic objectives into tactical action has long been a topic of discussion and debate among military professionals. In recent years new theories have been espoused, including the "Effects-Based Approach" (EBA) put forward by U.S. Joint Forces Command and "Systemic Operational Design" (SOD) advanced by retired Israeli brigadier general Shimon Naveh. While these theories claim to offer substantial advantage to the user, many readers find their content murky and the problem they seek to overcome unclear. A number of authors have explored the issue by examining historical events. Specifically, within the past few years several histories have scrutinized the design for OPERATION IRAQI FREEDOM (OIF) and the methods by which it was developed and implemented. These include *Plan of Attack* by Bob Woodward, *Cobra II: The Inside Story of the Invasion and Occupation of Iraq* by Michael R. Gordon and Bernard E. Trainor, and *Fiasco: The American Military Adventure in Iraq*, by Thomas E. Ricks. Books on operations in Iraq abound, but the authors of these three works enjoy professional reputations that resulted in an uncommon level of access to, and insight from, key participants and documents at all echelons. Additionally, in the past few months several retired general officers have commented publicly on the guidance and direction provided by the Secretary of Defense relative to OIF, spawning a series of news items, editorials, and professional journal articles commonly referenced as the "Revolt of the Generals." Whether espoused for theoretical, historical, altruistic or political purposes, collectively these works infer that there is some significant problem—doctrinal, organizational, procedural, educational, cultural, or personality driven—with the way in which the United States establishes strategic aims and orchestrates the elements of national power to achieve them.

So far there is little consensus on the true nature of the problem, even while ongoing operations in Iraq generate momentum for change—change that may be premature. There is a school of thought that believes the fundamental problem is a failure of intelligence compounded by

wishful thinking and an inability to understand the "view from the other side of the hill." Another believes it is a lack of counterinsurgency doctrine and training. Another posits that the problem resides at the "operational" level of command, with a variation involving the challenges of interagency coordination. Still another school of thought believes our doctrine, professional military education, training, and exercise design are over-focused on the linear application of planning processes while shortchanging decision making, execution, and especially assessment. Yet another sees the problem as one of a military culture and bureaucracy that is unwilling to adapt. Before rushing into major institutional changes, it would be prudent to examine the issues more fully to better understand and frame the problem and its component parts.

The purpose of this anthology is to provide selective writings on the subject in order to illuminate that portion of the problem which pertains to the pursuit of strategic aims. Examination of the civil and military organizations, processes and authorities charged with formulating strategic objectives would require a study in and of itself and is beyond the scope of this publication. Recognizing that assumptions usually generate risk, the underlying assumption of this publication is that the various government departments and agencies, especially the Department of Defense, will be guided by clearly stated, attainable strategic objectives. Making that assumption allows us to focus on that which is more directly within our purview: arranging and applying military capabilities, in concert with those of other government departments, agencies, and perhaps multinational partners, to achieve strategic aims.

What follows is a series of excerpts from doctrine, passages and commentaries on the aforementioned theories of EBA and SOD, and analytical articles that compare and contrast the ideas contained therein. They are intended as a means of promoting additional discussion and debate to generate a shared understanding of the problem so that we might set about developing appropriate solutions.

D. M. KING
Colonel, U.S. Marine Corps
Director, Concepts and Plans Division

Contents

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Synopsis of the Marine Corps Doctrinal Publications

By John C. Berry, Jr.

In the 1990's the Marine Corps published its view of, and approach toward, warfighting in a series of nine doctrinal publications. These Marine Corps Doctrinal Publications (MCDPs) espoused the concept of "maneuver warfare." Each volume is a pocket-sized book with an average length of 120 pages, conveniently packaged in a slipcover and popularly called "the box of books" or "the big nine." They include MCDPs: 1 *Warfighting*; 1-1 *Strategy*; 1-2 *Campaigning*; 1-3 *Tactics*; 2 *Intelligence*; 3 *Expeditionary Operations*; 4 *Logistics*; 5 *Planning*; 6 *Command and Control*. The big nine constitute overarching and enduring doctrine that should not be confused with more numerous, frequently revised subordinate Marine Corps Warfighting and Reference Publications (MCWP/MCRP) that address evolving tactics, techniques and procedures. This article synopsizes and edits pertinent passages from the MCDPs into a unified text summarizing the Marine Corps' view of the operational art.

Philosophy of Warfighting

The MCDPs provide an overarching philosophy of warfighting with the expectation that readers will digest, discuss and creatively apply the ideas contained therein. They do not prescribe specific techniques or procedures. Instead they provide ideas and values that require a high degree of professional competence and judgment in their application.

That overarching philosophy describes warfare as inherently chaotic, a competitive test of human wills that is filled with friction, uncertainty, disorder and rapid change. Success in such a fluid environment demands leaders and organizations that can understand the nature of a given situation and adapt to it faster than their opponents. The importance of time and speed has been articulated in the Boyd[1] theory, which states that conflict may be viewed as time-competitive cycles of ***observation-***

[1] John R. Boyd, "Patterns of Conflict" and "An Organic Design for Command and Control," *A Discourse on Winning and Losing*.

orientation-decision-action (OODA). Described by the MCDPs as a **"command and control process,"** it is more commonly known as the **"OODA loop."** It posits that when engaged in conflict at any level, we first ***observe*** the situation to take in information about our own status, our surroundings, and our enemy, trying to anticipate his next move. Having observed the situation, we ***orient*** to it by making certain estimates, assumptions, analyses, and judgments to create a cohesive mental image, or situational awareness. Based on our orientation, we ***decide*** what to do and then put that decision into ***action.*** The results of that action are monitored through feedback, which takes us full circle back to ***observation***. Based on historical analysis, Boyd asserts that the combatant who can execute the OODA loop faster and more effectively than his opponent is more likely to achieve victory.

The MCDPs propose four means of increasing our speed relative to our opponents. First, we can emphasize ***simplicity*** in all we do. Second, we can employ mission tactics and commander's intent to ***decentralize*** execution of operations. ***Mission tactics*** is the assignment of a task to a subordinate without specifying how it must be accomplished, while the accompanying ***commander's intent*** provides the overall purpose behind the task. Understanding the higher purpose, the subordinate can adapt his methodology for achieving it as the situation unfolds. A third way to become faster is through ***experience***, gained through training, planning or actual operations, which promotes implicit and lateral communication within the organization. The fourth way to generate speed is by the commander's ***positioning*** himself at the point of friction.

Strategic Context

The MCDPs provide the context for the application of this philosophy by describing how strategic goals are translated into tactical actions. ***National strategy*** is the art and science of developing and using the political, economic, and informational powers of a nation, together with its armed forces, during peace and war, to secure national objectives. ***Military strategy*** is the art and science of employing the armed forces of a nation to secure the objectives of national policy by the application of force or the threat of force. It is subordinate to national strategy and must be coordinated with the use of the nonmilitary instruments of national power. The political end state envisioned by policy makers determines the military strategy. A strategy of ***annihilation*** is used to achieve an ***unlimited political objective*** such as the overthrow of the

enemy leadership or its unconditional surrender. A ***strategy of erosion*** may be used to achieve a ***limited political objective*** by wearing down the enemy leadership's will to continue the struggle. Alternatively, a strategy of annihilation can also be used to achieve a limited political objective if it is believed that the enemy will continue to resist our demands as long as he has any means to do so.

The tactical level of war is the province of combat, the goal of which is defeating an enemy force through fighting at a specific time and place. The means of tactics are the various elements of combat power at our disposal, and its ways are the concepts by which we apply that combat power. Tactics can be viewed as the discipline of winning battles and engagements. A ***battle*** is a series of related tactical engagements. An ***engagement*** is a small tactical conflict, usually between maneuver forces.

To translate strategy into tactical action, there is a level of the military art linking the two called the ***operational level of war***. ***The aim at the operational level is to get strategically meaningful results from tactical efforts.*** The principal tool by which the operational commander pursues the strategic goal is the ***campaign***. A campaign is a series of related military operations aimed at accomplishing a strategic or operational objective within a given time and space. Guided by the strategic aim of either erosion or annihilation, the operational commander articulates a ***campaign concept*** that expresses in clear, concise, conceptual language a broad vision of what he plans to accomplish and how he will do so. The campaign plan flows directly from the campaign concept and concisely describes a sequence of related operations that lead to a well-defined military end state, which will attain the strategic aim. The plan may describe the initial phases of the campaign with some certainty. However, the design for succeeding phases will become increasingly general as uncertainty grows and the situation becomes increasingly unpredictable.

Operational plans and directives that are rooted in political and strategic aims establish the necessary focus and goals for tactical actions. Operational planning provides the context for tactical decisionmaking. No amount of subsequent planning can reduce the requirement for an overall concept. Campaign planners must understand the chosen strategy and its implications at the operational level. Failure to understand the basic strategic approach (annihilation or erosion) will

prevent the development of a coherent campaign plan and may cause military and diplomatic leaders to work at cross-purposes. While strategy drives campaign design, which in turn drives tactical actions, the reverse is also true. Tactical results generate modifications to campaign design, which in turn may have strategic implications.

The art of campaigning means understanding when military force is our main effort and when it is acting in support of some other instrument of our national power. ***Lower-echelon commanders must understand the strategic context of their tactical missions*** if they are to provide useful feedback to higher levels on the effectiveness of field operations. Consequently, our strategic goals must be communicated clearly to commanders at every level.

Planning, Decisionmaking, Execution and Assessment

Whether applied at the strategic, operational, or tactical levels, carrying out the command and control practice involves four inter-related activities: ***planning, decisionmaking, execution*** and ***assessment***. Many Marines refer to these activities as **"PDE&A,"** which may unintentionally imply a linear application. Neither the acronym nor a linear approach is put forth in the big nine. Each of these terms is, instead, discussed in varying levels of detail in the different volumes as appropriate to the focus of each book. This approach reflects the complex relationship between each these activities that defies linear application.

Of the four activities, the MCDPs place the greatest emphasis on ***decisionmaking.*** They describe the principal aim of command and control as enhancing the commander's ability to make sound and timely decisions. Because situations change continuously, ***all decisions must be made in the face of uncertainty.*** While it is natural to seek additional information to lesson that uncertainty, it usually comes at the expense of ***time***. Since the OODA loop is a time-competitive process, decisionmakers must find a balance between uncertainty and time to achieve superior ***tempo*** over opponents. While decisionmaking is often theoretically viewed as an ***analytical process*** of comparing options against some set of criteria, it can also be viewed as ***intuitive***, whereby an experienced decisionmaker recognizes the key elements of a particular problem and arrives at the proper decision. ***While the two***

approaches to decisionmaking are conceptually distinct, they are rarely mutually exclusive in practice.

Since war is a conflict between opposing wills, decisions cannot be made in a vacuum. They must be made in light of the enemy's anticipated reactions and counteractions, recognizing that while we are trying to impose our will on the enemy, he is trying to do the same to us. A military decision is not merely a mathematical computation. ***Decisionmaking requires both the situational awareness to recognize the essence of a given problem and the creative ability to devise a practical solution.*** These abilities are the products of experience, education, and intelligence.

Experience provides an understanding of the practical problems of execution and an appreciation for what is feasible and what is not. Professional education seeks to instill sound judgment in leaders at all levels. Intelligence is a key ingredient in gaining and maintaining situational awareness, as well as a central component of the OODA loop. **While we can often assess the enemy's capabilities, we can rarely be certain of his intentions.** Capabilities are based ultimately on factual conditions, while intentions exist only in the mind of the enemy—assuming the enemy even knows clearly what he wants to do. Thus, **any assessment of enemy intentions is ultimately an estimate.** One of the key functions of intelligence is to support ***combat assessment***. Combat assessment is the process used to determine the effects of friendly actions on the enemy. It includes battle damage assessment, which refers specifically to the effects of friendly fires on enemy targets. It also applies more broadly the overall effects of friendly actions on enemy capabilities and intentions. Combat assessment provides the basis for future friendly actions as well as a dynamic link back to the first step of the OODA loop.

Planning is an essential part of command and control, helping us to decide and act more effectively, and also receives particular attention in the MCDPs. ***Planning is the art and science of envisioning a desired future and laying out effective ways of bringing it about***. As such, planning is one of the principal tools the commander uses to exercise command and control. Planning involves elements of both art and science, combining analysis and calculation with intuition, inspiration, and creativity.

Planning and plans accomplish several key functions:

- Plans ***direct and coordinate action*** by instructing those within the unit what to do and informing those outside the unit how to cooperate and provide support.

- Planning ***develops a shared situational awareness***. The process of planning itself should provide a common understanding of the nature of the problem and so support communication and cooperation. In other words, planning is a way of exploring the situation. Even if the understanding of that situation is incomplete or not entirely correct—*and most attempts to attain situational awareness will be both*—the common understanding provides a basis for unity of effort.

- Planning ***generates expectations*** about how actions will evolve and how they will affect the desired outcome. As previously mentioned, planning can serve as a partial substitute for experience.

- Planning ***supports the exercise of initiative***.

- Planning ***shapes the thinking of planners*** by providing a disciplined framework for approaching problems.

The fundamental challenge of planning is to reconcile the tension between the desire for preparation and the need for flexibility in recognition of the uncertainty of war. The big nine emphasize that planning is an ongoing process, and that any plan must be thought of as an interim product based on the information and understanding known at the moment. A plan is always subject to revision as new information and understanding emerge. ***A plan is the basis for action, cooperation, and adaptation.***

As it is with command and control, the defining features of the planning challenge are uncertainty and time. ***Because situations change continuously, progress toward established goals must be continuously assessed so that plans can be adjusted accordingly.*** The more frequently and quickly the situation changes, the more often a plan must be revised. Since war is an interactive clash between independent wills, military situations are not one-sided problems, as are engineering

problems. Even as we begin to develop a solution to a problem, the problem changes.

Effective planning requires two vastly different types of mental activity: ***analysis and synthesis***. Analysis generally corresponds to the science of planning. Synthesis generally receives less attention than analysis, but it is just as important—if not more so. While analysis involves systematically decomposing a whole into parts, synthesis is a function of creativity and judgment. ***Planning requires both the judgment of synthesis and the systematic study of analysis in some combination.***

Another way to categorize planning is by its relationship to decisionmaking. Planning that occurs before the decision is called ***decision planning.*** Decision planning supports the actual command decisionmaking process by helping to develop an estimate of the situation and by generating, evaluating, and modifying possible courses of action. It studies the feasibility and supportability of the various courses under consideration. Decision planning is generally ***conceptual planning.*** Planning that occurs after the decision has been made is ***execution planning.*** Execution planning principally involves functional and detailed planning. ***Functional planning*** is concerned with the components necessary to support the concept: the subordinate concepts for command and control, maneuver, fires, intelligence, logistics, and force protection. ***Detailed planning*** encompasses the specific planning activities necessary to ensure that the plan is coordinated: specific command relationships, movements, landing tables, deployment or resupply schedules, communications plans, reconnaissance plans, control measures, etc. ***Conceptual, functional, and detailed planning are seldom conducted in a linear fashion because the situation, and available information, are continually evolving.*** While conceptual, functional and detailed planning can be described in a linear fashion, in practice they are conducted in a more interactive manner due to the imperatives of uncertainty and time.

MCDP 5 provides a model of the planning process. Planning generally starts with ***assessing the situation.*** Based on our assessment of the situation, we ***establish the goals and objectives*** we expect to pursue, including the underlying intent. These goals and objectives may be assigned by higher authority, or we may establish our own goals and objectives based on our situation ***assessment***. Having envisioned the desired future, we next ***conceptualize a course of action*** by which we

expect to realize that future. We describe the salient features of the plan and the interactions among them. Next, having developed the plan in broad outline, we ***detail the course of action***. This phase includes ***execution* planning—**developing practical measures for carrying out the concept. An important part of the planning process is ***evaluating the course of action,*** in which we try to identify likely difficulties or coordination problems as well as the probable consequences of the planned action. **A plan evolves over time, and so we continue to cycle through the process as time permits**, refining the plan until the time for execution, at which point the latest version of the plan becomes the basis for action.

In fact, planning continues even after execution has begun, as we continue to revise later phases of action as the situation unfolds. An important aspect of this model of the planning process is that much of planning is actually replanning. ***It is important to remember that planning is not, in reality, a simple sequence of steps. It is a complex process of interacting activities.*** We should also keep in mind that planning is going on in other organizations—above, below, and adjacent—at the same time and that all this planning is interrelated. This complex interaction is one of the reasons that effective planning cannot be reduced to a linear sequence of steps.

Finally, a plan should include some ***control process*** by which we can supervise execution. This control process includes necessary coordination measures as well as some ***feedback mechanism*** to identify shortcomings in the plan and make necessary adjustments. The control process is a design for anticipating the need for change and for making decisions during execution. In other words, the plan itself should contain the means for changing the plan. ***This is a component of plans which often does not receive adequate consideration.***

Maneuver warfare emphasizes planning as a continuous learning and adapting process rather than as a scripting process. Maneuver warfare requires the ability to adapt—to be able to depart from the original plan to exploit fleeting opportunities—and ***planning importantly provides the point of departure for such adaptation in execution.*** We can promote that flexibility and adaptation by:

- Establishing objectives that are broadly, but not vaguely, defined—objectives which provide latitude in the manner of accomplishment.

- Developing loose, modular plans. These allow subordinates to adapt without infringing on other parts of the plan.

- ***Developing plans with feedback mechanisms designed to provide information about how the action is developing and to identify the need to make adjustments to the plan.*** We may explicitly design decision points, points in a plan of action requiring a decision about how to proceed in execution.

- Designing plans of action that permit multiple options in execution. We may design specific *branches* and *sequels*, planned alternatives or follow-on phases for likely contingencies, but we should also maintain the flexibility to pursue other options that are not planned.

- Providing shared situational awareness and mutual expectations. A common understanding improves the ability to recognize the need to adapt and to cooperate with others while doing so.

- Providing a compelling logic for action that makes it easier for subordinates to exercise initiative while conforming to the higher purpose. The compelling logic for action finds expression in the commander's intent for each subordinate.

Addendum to the Big Nine

MCDP 1-0 *Marine Corps Operations* was published in 2001. Originally crafted as a Marine Corps Warfighting Publication, this document merged the philosophy contained in the big nine with a level of technique and procedure normally found in warfighting or reference publications. PDE&A was discussed under the heading of "operational design." As recent experience had demonstrated that assessment was especially challenging, it also included a lengthy discussion of that activity:

> *Commanders initiate the conduct of operations with a design that will guide their subordinate commanders and the staff in* **planning, execution, and assessment**. *The commander uses his operational*

design to **visualize, describe, and direct** *those actions necessary to achieve his desired end state and accomplish his assigned mission. It includes the purpose of the operation, what the commander wants to accomplish, the desired effects on the enemy, and how he envisions achieving a decision. The commander* **assesses** *the operation by comparing the envisioned operational design—as expressed in the operation order—with what is actually occurring in the battlespace…*

Assessment is the continuous appraisal of military operations to determine progress toward established goals…*This perceived difference between what was planned and what actually happened then becomes the catalyst for* **decisionmaking.**

Commanders assess their operation's effectiveness by measuring how successful they have been in completing the tasks stated or inherent in their mission. *They determine if operations have met the conditions previously established that support an upcoming decision by the commander or if the task has been completed.* **Conditions should be linked to the purpose of the task and be understandable, relevant, and measurable.** *Since some conditions are necessarily complex, commanders and their staffs may also use measures of effectiveness to further describe those conditions that must be met before a task is completed or a new phase of the operation can commence.* **Measures of effectiveness** *are indicators that demonstrate the degree to which a condition has been satisfied. They provide the commander with a tangible indicator of how close he is to achieving his desired conditions.*

The intelligence collection effort, as well as the overall combat reporting process in the force, must focus on providing timely and useful information to the commander to aid him in his assessment of operations. The fulfillment of CCIRs and priority intelligence requirements will often be critical in determining whether the task has been completed and the conditions exist to support transition from one phase of the operation to another. **While assessment routinely takes place throughout the planning, deployment, and redeployment phases of an operation it is truly essential during execution.**

Insights

The process of assembling, synopsizing, and editing those portions of the MCDPs related to the operational art revealed a body of work that appears logical, reasonable, comprehensive, and sound. Arguably,

however, there are two shortcomings: ***the content is dispersed across several volumes instead of in a unified text*** and ***the key role of assessment is largely inferred vice specifically articulated.***

Additionally, how the MCDP body of work has been incorporated into the subordinate MCWPs/MCRPs as well as professional military education and training are topics that bear further examination.

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1st Marine Division and Operation IRAQI FREEDOM

By LtCol Clarke R. Lethin[2]

No Better Friend, No Worse Enemy:
Planning, Speed, And Intent Within The 1st Marine Division.

On the evening of 20 March 2003, months, days, and hours of planning and preparation for combat against enemy forces in Iraq were put to the test. The combat phase of Operation IRAQI FREEDOM lasted approximately 28 days and ended in the seizure of eastern Baghdad, Tikrit, the destruction of regular Iraqi divisions, Republican Guard divisions, and countless fedayeen and foreign thugs within the 1st Marine Division's (1st MarDiv's) zone. The operations by I Marine Expeditionaiy Force (I MEF) have been well-documented by die media, soon to be released after-action reports, and unit command chronologies. The focus of this article will be on three critical concepts developed and used by the division.

Even though we were hugely successful against the enemy, that success was paid for in the lives and injuries of brave Marines and sailors who served or supported the division's operations; this should not be forgotten.

There are volumes of lessons learned from the conduct of operations for the division and how we chose to fight. There is no way to cover them all in this article, so I will discuss three areas: how we planned (in preparation for and during combat operations), how we used speed as a metric, and the value of commander's intent. Although these issues seem fundamental, it is brilliance in the basics that is the foundation of all great teams.

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Planning

In the summer of 2002 there were sufficient indications that the United States would commit forces to remove the Iraqi regime. I MEF was the Marine Corps' operational command for Marine forces under operational control to Coalition Forces Land Component Command (CFLCC). The division was the primary ground combat element for I MEF throughout planning and execution of operations in Iraq. The Marine Corps Planning Process (MCPP) works. If you don't know it now, learn it. If you think you know it, keep learning because you haven't mastered it until you've been in combat, and even then you keep learning. From the I MEF led operational planning teams (OPTs), to division OPTs, to the regiments and separate battalions, planning was continuous until we crossed the line of departure (LD). The plan was continually refined, scrapped, rewritten, published, changed-in other words, we planned early and planned often. The commencement of combat operations did not negate the value and requirement to continue to plan. We were planning current and future operations during combat. The shared situational awareness gained from prior planning was invaluable.

What is important is that we must all understand the doctrine and process of MCPP. MCPP places everyone on the same playing field, providing a common point of departure and set of procedures. The process can be modified and adapted as circumstances and time allow. The other tool required during planning is the ability to conduct rapid planning, much like the rapid response planning process (R2p2). MCPP and R2p2 are complementary and were extremely valuable during combat operations when speed was essential to getting the next fragmentary order (FragO) to subordinate units. The division's "opening gambit" plan was a thorough plan that changed hours before crossing the LD due to a fluid friendly situation and the assessment of enemy intelligence. Remember, the guy across the LD has a mind of his own. During the division's attack north to Baghdad, our OPT published no fewer than 30 FragOs that included changing main efforts, reorganizing the assault units, changing directions, and conducting operations on urbanized terrain. These FragOs were issued with as near a seamless transition between planners and operators as you could find on that chaotic battlefield.

How was this done? Experienced planners, trained and tested at Camp Pendleton, Twentynine Palms, and Kuwait, all understood many months prior to crossing the LD that any day could be their last before combat,

and we had to make the most of every day. The division assumed back in August 2002 that every week was our last week at peace.

Speed

The second area to discuss is speed as a metric. Most of us think of speed in operations as how fast we can get from point A to point B. That's only one measure. For the division, speed was a culture. Speed means more than just physical speed; it's a way of thinking-the mental gymnastics we have to do to solve a problem quickly and efficiently. Our team had the physical capacity for speed. One of our guiding tenets was that every Marine had to be mobile and have a seat. An operational design that relied on shattering the enemy's will to fight by cutting him off from his logistics and command and control required division units to move everyone and everything at the same time. When enemy intelligence indicated the Iraqis were destroying oil infrastructure in the Rumaylah oil -fields, Regimental Combat Team 5 was able to attack from a standing start within 5 hours of notification-a dawn attack modified into a night attack.

With physical speed we also needed the means to communicate and to deliver devastating fires on the enemy. Our speed of communications was obtained by using the newly fielded SMART-T (secure mobile antijam reliable tactical terminal), high-frequency radios, AN/PSC-5, Iridium phones, blue force tracker, messengers, carrier pigeons-you name it, we used it. Speed of fires was delivered by the full integration of artillery units in our maneuver forces and a dogged determination by the artillery to get forward to support the assault units. Additionally, the speed of aviation fires was delivered day and night under some of the harshest conditions by our brother aviators. An example of this is the night 3d Light Armored Reconnaissance Battalion (3d LAR) pushed over 100 miles up Route 1 and triggered an enemy ambush. When "sling shot" (code word for overwhelming enemy attack) was heard over the airwaves, 3d Marine Aircraft Wing responded immediately, reprioritized and built a close air support stack over 3d LAR, and ensured the complete destruction of the enemy unit. Our ability to think and move rapidly, from the youngest private first class assaulting that last 100 yards to our senior commanders and planners, was extraordinary.

My observations center on how the division's main and forward combat operations centers (COCs) functioned. From setup to breakdown of the

COC, every Marine knew that rapid transfer of control was critical to maintaining momentum of the division. Within the COC, information flow and the simple axiom was applied:

- What do I know?
- Who needs to know?
- Have I told them?

Speed and accuracy of passing information in a chaotic atmosphere such as a COC is challenging. It was fully understood that to have speed of thought and action there could be no egos and that teamwork, not individuals, would make for rapid action. The social energy to continue to connect the dots, keep people motivated, and make rapid and concise decisions is not easily taught and can only be earned, never demanded.

Commander's Intent

> *We will swiftly secure, key oil nodes allowing the least possible opportunity for their destruction. We will shatter enemy forces south of the Euphrates, west of the Shatt al Basrah and east of An Nasiriyah, opening the MSR [main supply route] and gaining positions north of the river to facilitate operations in the vicinity of Al Kut via Routes 1, 7 or 6 as the situation dictates. In order to achieve tactical surprise, we will first blind enemy reconnaissance, then close on the border. We will be prepared to accept enemy capitulation, but destroy the 51st Mech Division and its adjacent/ supporting units if they fight. To the greatest extent possible, we will limit enemy or friendly damage to the oil infrastructure.*
>
> *We must negate enemy artillery through shaping, preparatory, or responsive counter fires. I expect maximum use of air fires, assault support will be used if rapid linkup is achievable. Speed is the measure: speed coupled with harmony of information flow; rapidity in decision making; orders promulgation; counter fire; response to changing conditions; re-supply; CAS-EVAC [casualty evacuation]; identification of multiple routes; obstacle reduction; maneuver; relief in place; and hand off of EPWs [enemy prisoners of war]. We will avoid all possible FPOL [forward passage of lines] and any other mingling of forces, and whenever possible create conditions of chaos for our enemies. Aggressive tempo and initiative are vital. Once we have seized the*

nodes, we will rapidly hand over the zone and EPWs to 1st UK Div and reposition north of JaIibah. Crossing the Euphrates and moving against Al Kut, 1st MarDiv supports 3ID's [3d Infantry Division's] attack along our western flank, denying the enemy opportunity to mass against CFLCC's main effort.

The last point is commander's intent. How many times have we seen commander's intent developed by the staff, lethargically reviewed by the commander, and then delivered in a briefing without the least bit of emotion? The division fought by commander's intent-a statement of intent that reflected the commander's personality, intuition, sense of purpose, and then delivered to every Marine and sailor in the division. Prior to crossing the LD there were a thousand issues the commander needed to address. One issue that was never compromised was the commander taking the time to speak with every unit and deliver his intent.

Initially our aim point was in the vicinity of Al Kut, over 200 miles from the Kuwait border. That aim point changed approximately 200 miles from Baghdad with the intent to split the enemy's defenses and drive rapidly to the outskirts of Baghdad. What made this possible was the unequivocal understanding by the division staff and commanders of what the commander wanted. Every sentence and word in the commander's intent carried weight. What was highlighted included, ". . . secure key oil nodes . . . destroy the 51st Mech Division . . . maximum use of air fires . . . speed is the measure . . . aggressive tempo." The initial intent carried the division through the opening gambit, past An Nasiriyah, and up Routes 1 and 7 toward Baghdad.

Subsequent commander's intent was given to the OPT to be included in FragOs or personally delivered to the subordinate commanders. Equally important to the commander giving the intent was the division staff fully understanding the intent. This can only be accomplished by the social energy and the force of will by commanders and staff to get it right and carry the message, because success depends on it. Our mutual experiences from boot camp, Officer Candidates School, career-level school, training exercises, and shared hardships in combat give all of us the capacity to understand each other like no other profession. When out of communications with the commander, the subordinate commanders knew what to do. The commander's intent is the glue that holds us together and ensures we can achieve objectives beyond expectations.

In the past 2 years our Marine Corps has been actively involved in the operations in Afghanistan, the Horn of Africa, and Iraq. Having been involved in Afghanistan and Iraq, I see the strengths of our operations as our ability to plan, our willingness to move swiftly where others wouldn't, and the quality of our leaders to give us clear and concise guidance. Our successes have come from shared experiences and a determination to get it right with the lowest possible butcher's bill. It's not easy. It takes education, experience, sacrifice, but when it is time to stand and deliver a victory at the least cost, the Corps can be counted on.

An Assessment of the Marine Corps Planning Process

By John C. Berry, Jr.

Subsequent to publication of the original nine Marine Corps Doctrinal Publications (MCDPs), Marine Corps Warfighting Publication (MCWP) 5-1, *Marine Corps Planning Process*, was published (January 2000). Unlike the original MCDPs, which provide broad concepts and principles that guide action, the MCWP 5-1 provides more detailed techniques and procedures for planning. This article provides a brief description of the Marine Corps Planning Process (MCPP) and proposes refinements to how it should be promulgated in an updated version of MCWP 5-1.

Description

Informed by the maneuver warfare philosophy, the MCPP recognizes that planning is an essential and significant part of command and control and ***codifies the central role of the commander in the planning process.*** The MCPP is applicable across the range of military operations and is designed for use at any echelon of command. Time and uncertainty dictate the approach to planning, and the MCPP can be scaled by commanders to be as detailed or abbreviated as time, staff resources, experience, and the situation permit.

The MCPP is driven by three tenets that are applied throughout six steps. The ***three tenets*** of the MCPP are:

- ***Top-Down Planning***—the active participation of commanders driving the process at their respective levels to gain knowledge and situational awareness to support decisionmaking.

- ***Single-Battle Concept***—understanding that events in one part of the battlespace may have profound and often unintended consequence in another, thereby demanding unity of effort from all elements of the force.

- ***Integrated Planning***—applying a systematic, coordinated, and thorough approach to planning through the employment of a

planning team, composed of subject matter experts in appropriate disciplines, to consider all relevant factors, reduce omissions, and share information.

Conceptually, the ***six steps*** of the MCPP can be described simply and succinctly:

- ***Mission Analysis*** is employed to enhance understanding of the situation and identify ***what*** the command must accomplish, ***when*** and ***where*** it must be done, and most importantly, ***why***. Put another way, mission analysis is about ***framing the problem***. Since no amount of subsequent planning can solve a problem insufficiently understood, mission analysis is the most critical step of the MCPP. The understanding gained through mission analysis is articulated in the mission statement and commander's intent. There are two parts to any mission: the task to be accomplished and the intent or ***purpose*** behind it. The task describes what is to be done, and sometimes when and where; the intent explains the "why"—the purpose. As operations unfold tasks may be overcome by events, but the ***purpose*** will endure—thus allowing subordinates to exercise initiative while maintaining unity of effort.

- ***Course of Action (COA) Development*** outlines one or more broad options for ***how*** the mission and commander's intent might be accomplished. Simply put, COA development and all subsequent steps are about ***providing options for the commander*** while continuing to refine the understanding of the problem**.**

- The ***COA War Game*** critically examines and refines the broad option(s) in light of enemy capabilities and potential actions/reactions as well as the characteristics peculiar to the operating environment. This detailed examination of the environment and possible enemy reactions should force a greater appreciation of the situation.

- During ***COA Comparison and Decision***, pros and cons of the broad option(s) are reviewed and the commander decides how he will accomplish the mission, either by approving a COA as

formulated or by assimilating what has been learned into a new COA.

- ***Orders Development*** translates the commander's decision into oral, written, and/or graphic communication sufficient to guide implementation and initiative by subordinates, and often involves additional detailed planning.

- ***Transition*** may involve a wide range of briefs, drills or rehearsals necessary to ensure a successful shift from planning to execution, subject to the variables of echelon of command, mission complexity and, most importantly, time.

While these steps are presented in linear fashion, it must be recognized that planning seldom occurs in the same straightforward manner. Environmental factors, enemy action, updated intelligence, changing resources, revised guidance from higher headquarters, and input provided as a result of operations and concurrent planning by subordinate, adjacent and supporting units will all contribute to making most planning endeavors highly complex and nonlinear in practice. As articulated in the Marine Corps Doctrinal Publications (MCDP), ***the problem will evolve even as we are trying to solve it.***

The Problem

As described by Colonel Clarke Lethin in his article "1st Marine Division and Operation IRAQI FREEDOM," The true value of the MCPP is the process itself, vice the product ("the plan") it generates. The shared situational awareness generated by the process allowed subordinates to rapidly assimilate changes when the plan was overcome by events. Armed with that high level of situational awareness and guided by commander's intent, subordinate commanders were able to exercise initiative while maintaining unity of effort. Colonel Lethin's emphasis on the value of planning as a *process*, over the value of the plan itself, re-affirms the philosophy and content of the MCDPs, especially MCDP 5, *Planning*. Unfortunately, this primacy of the process over product is not emphasized sufficiently in MCWP 5-1 *Marine Corps Planning Process*. ***The 5-1 provides little conceptual background to aid understanding of the MCPP,*** including only a brief synopsis of the functions of planning in the opening chapter:

"Whether planning is performed at the strategic, operational, or tactical level, its key functions, as identified in MCDP 5, Planning, *are to—*

- *Direct and coordinate actions.*
- *Develop a shared situational awareness.*
- *Generate expectations about how actions will evolve and how they will effect the desired outcome.*
- *Support the exercise of initiative.*
- *Shape the thinking of planners.*

This brief passage barely touches on the conceptual underpinnings for the MCPP. While the 5-1 states that the process "is applicable across the range of military operations and is designed for command and staff actions at any echelon," its content is largely focused on the techniques, procedures and products applicable at higher echelons of command conducting conventional combat operations. Information is presented in a manner that promotes *following* a process without benefit of *understanding* the process. The unintended consequence is that the MCPP comes across as complex, mechanical, very linear, and product focused. This failure to include an adequate conceptual baseline within the 5-1 is a serious omission, because without that conceptual understanding the commander's ability to scale the process as required to suit the echelon of command, nature of the mission, available information, or time constraints is problematic. Even more serious is that the essence of the MCPP, as the means of advancing collective understanding the problem and developing creative solutions, becomes less apparent.

Proposed Refinements

Marine Corps Warfighting Publications are normally reviewed every five years, meaning that the 5-1 is a year overdue for an update. With relatively minor refinements, the omissions described above can be easily overcome through the normal review process.

First and foremost, the introductory chapter should provide a synopsis of MCDP 5, *Planning*, and pertinent extracts from the other MCDPs, in

order to provide context for the subsequent description of the process. After providing that context, the introductory chapter can conclude with a conceptual overview of the MCPP, not unlike that which appears in the beginning of this article. The theme that should be emphasized in the introduction is the ***primacy of the process over product*** as the means of promoting shared understanding of the evolving problem and fostering adaptation in solving it.

Second, each of the next six chapters should open with a conceptual description of what that individual step is supposed to accomplish. Currently, each of these chapters opens with a diagram showing "inputs-process-outputs" for the step it describes. While these diagrams have some utility, two of the three columns are product oriented and unintentionally send the wrong signal. Rather than using them to open each chapter, they should be used at the end as graphic summaries. The emphasis at the beginning of each chapter can then be re-oriented on presenting the "big idea" behind that step. For example, the opening text of Chapter 2, Mission Analysis, currently reads:

> *Mission analysis is the first step in planning. Its purpose is to review and analyze orders, guidance, and other information that is provided by higher headquarters in order to produce a unit mission statement.*

While factually correct, that statement is not comprehensive nor does it capture the essence of mission analysis. Mission analysis is fundamentally about gaining sufficient understanding of the problem to be solved. In conventional combat operations this understanding will likely be derived from enemy capabilities, order of battle, and tactics; operations by higher, adjacent, and supporting friendly units; and those terrain and weather considerations that impact on operations. In unconventional operations, such as counterinsurgency, understanding the problem will require an appreciation of complex social, cultural, political, and economic factors as well. Whether involving conventional or unconventional operations, higher headquarters will seldom be the sole source of "other information," which is likely to come from a wide variety of sources such as subordinate, adjacent, and supporting units, interagency and multinational partners, local civilians, encyclopedic data, and reach-back expertise. A more comprehensive conceptual introduction might be:

> *Mission analysis is the first, and most critical, step in planning. Its purpose is to review and analyze orders, guidance, the enemy, the environment, and other available information in order to enhance understanding of the situation and identify what the command must accomplish, when and where it must be done, and most importantly, the* ***purpose*** *of the operation. This understanding is articulated in the mission statement, the commander's planning guidance and ultimately the commander's intent.*

Similarly, the opening paragraphs of the chapters on COA Development, COA War Game, and COA Comparison and Decision should be refined to clarify that their focus is on enhancing understanding of how the problem might be solved, vice the often assumed notion that they constitute a competition among OPT members to produce the "winning COA." In practice commanders rarely choose a COA as produced by the OPT, preferring instead to assimilate the insights learned throughout the process to formulate a modified, or perhaps new, COA.

Third, some of the text needs to be revised to ensure it addresses the full spectrum of operations. As alluded to above in the mission analysis discussion, in its current form the 5-1 appears over-focused on conventional combat operations. As an example, the passage on Integrated Planning in Chapter 1 states that "The key to integrated planning is the assignment of appropriate personnel to represent each warfighting function." (The warfighting functions are command and control, maneuver, fires, intelligence, logistics, and force protection.) No mention is made of how other functional expertise might be required to perform specific missions. Counterinsurgency, for example, will likely require expertise in civil affairs, economic development, the promotion of governance, or information operations. The desirability of interagency and multinational representatives is omitted. Another example is the Chapter 2 discussion of center of gravity, which states that "At the tactical level, the enemy's center of gravity is normally an enemy unit. At the operational level, an enemy's center of gravity may be a threat capability; e.g., the ability to mass fires or conduct resupply." No examples are provided concerning centers of gravity in counterinsurgency or humanitarian relief operations, which are usually associated with the population as a whole vice enemy units or capabilities. The same trend carries over into the Red Cell discussion. "A red cell assists the commander in assessing COAs against a thinking enemy." Who assists the commander in assessing the population's perceptions of both red and blue actions, or the impact of those actions upon local culture? The appendices likewise need to be expanded to address the full spectrum of

operations, especially Appendix D, Marine Corps Planning Process Tools, which provides formats for various matrices and graphic overlays, all of which are exclusively focused on a mechanized ground opponent.

Fourth, examples cited in the text and the appendices should strike a balance between applicability for large and small units. Currently, the examples offered are focused on the Marine Expeditionary Force (MEF). A MEF level OPT planning a major operation might involve dozens of subject matter experts laboring for weeks, producing formal briefs and an exhaustive operations order. A battalion level OPT could consist of the commander, his primary staff officers, and company commanders spending a few moments huddled around a map or drawing a diagram in the sand. The 5-1 does not reflect that diversity. Appendix F, Commander and Staff Estimates and Appendix G, Basic Operation Plans, Operation Orders, Annexes, and Appendices, provide voluminous and exhaustive format examples that comprise 75% of the document. Clearly the intent behind these appendices is to provide the fullest example, so that commanders and staffs can select those elements applicable to their situation. Unfortunately, some readers come away with the impression that an operations order must be voluminous. These examples can be pared down and offset by other examples illustrating what orders might look like for lower echelon units with fewer resources and shorter planning horizons.

Summary

The MCPP is sound and has proven its worth in recent operations. Successful practitioners ardently espouse the need to understand and master that process. The Marine Corps can better promote that end by revising the current version of MCWP 5-1 to clearly articulate the primacy of process over product and illustrate how it is adaptable across the range of operations and echelons of command.

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Interagency Campaign Design

By LtCol Lance A. McDaniel, USMC

Background

Sometime during virtually every intervention activity that the U.S. military has been involved in, at least since WWII, there seems to come a point when the military realizes that military force alone may not solve the problem—may not lead to the stability that is usually the desired endstate. Now more than ever, complex crises pose problems that defy relatively simple kinetic military solutions. This "revelation" does not detract from the central importance of military capability in the accomplishment of national security objectives. The issue is more an acknowledgement of the multi-faceted nature of current conflicts in which other partner agencies may play an equally important, albeit less visible, role in the campaign. The phrase "all elements of national power" is often used; unfortunately, from a United States perspective, the elements beyond the military have not regularly played an integrated role in either the design or execution of U.S. intervention campaigns.

Challenges of Today's Security Environment

While every generation of leaders is probably convinced that the problems they face are unique in history, the challenges of the current security environment are indeed different. What makes today's environment different? Since at least the Treaty of Westphalia of 1648, and some would argue since the time of the Greeks, nations have generally waged war against nations. Normally that pitted armies against armies and navies against navies. However, for several reasons, including the fall of the Soviet Union and the rise in prominence of militant radical Islam, violence between societies and cultures is no longer reserved for the traditional combatants. Those who wage violence, including terrorist acts and the more "traditional" activities of insurgency, now hide amongst the people. In so doing, these violent actors negate the huge advantages in firepower that the United States and other western nations enjoy.

Statement of the Problem

Though the intervention activities we become involved in are complex, multi-faceted affairs, the United States continues to treat them in an overly simplistic fashion. We develop campaigns which are overly militaristic, and if they involve Inter-agency planners at all, they do so after the plan has already been developed. Inter-agency planners tend to play only a minor role in contingency campaign design. Organization culture (language and doctrinal differences), structure, and fiscal issues tend to make Inter-agency cooperation extremely difficult. The need for interagency cooperation, such as it has been acknowledged, has not become manifest in the form of a standing agreement of who the interagency planners are and how and when they will work together to deal with an intervention.

The Central Idea

Although *ad hoc* planning teams may be the norm for awhile, a goal should be the formation of some formal or semi-formal relationships for Inter-agency intervention planning and preparation. All Inter-agency players need to learn to work together as partners. Only a campaign based on a comprehensive approach in which all Inter-agency players are involved in planning and execution is likely to realize any chance of successfully resolving complex intervention problems.

Key Principles

1. The Comprehensive Approach requires an Inter-agency partnership. What is the "comprehensive approach?" The answer must begin with an explanation of what constitutes a "campaign." A campaign in this sense is a number of disparate actions and activities that are coordinated to realize a singular intervention endstate—and it can transcend the various "levels of war." The comprehensive approach is an acknowledgement that these disparate actions will normally reach far beyond the traditional military responses. Leaders of an intervention should select logical lines of operation for their campaign in an effort to address all aspects of a problem as they understand it. An example of this might be the selection of both a security line of operation and an essential services line of operation. The reality is that the military may be very good at a combat or security line of operation, assuming that the

campaign has a requirement for elements well beyond this (such as government, economic development, and essential services), there are other agencies with the U.S. government with greater knowledge for planning these activities. From a policy standpoint, these other agencies have the "right" kind of monies for these "other lines." Therefore, a multi-faceted or comprehensive campaign needs the cooperative efforts of numerous agencies of government. This cooperation should take the form of a partnership for planning and execution—not an essentially military staff with a few token IA representatives for perfunctory planning.

2. Use all relevant tools of government. Every government agency will not be represented on an IA planning staff. The important issue is the mental drill of determining which agencies should be players. However, the time to really get into making this determination is during the discussion of the lines of operation that the planners select—and who will lead each sub-task in each line of operation. The point here is to ask yourselves the questions: "Who should be here and what tools have we neglected that should rightly be a part of this campaign?" Campaign design is a participatory process and this will require open sharing of information amongst stakeholders.[3]

3. Multiple Lines of Operation for a comprehensive campaign. After acknowledging the complexity of the problem that the intervention effort has been assigned to address, there is a natural tendency to "deconstruct" the problem. Unfortunately, complex problems do not lend themselves well to being broken down like an engineering problem as so many functions and activities inter-relate in some manner. Most campaigns will have numerous lines of operation and they must function together as one harmonious whole.

4. Involve "others" in campaign design. To achieve an Inter-agency campaign design, there should be a broad cross section of represented agencies on the planning team. The next question is to ask yourselves who else should we involve in this design? Non-governmental organizations (NGOs) and others like them will not want to be aligned with your design process. However, they may have goals that run parallel with yours. Once you determine your vision, endstate and campaign architecture, you are in a position to converse with NGOs and

[3] MCDP 5, *Planning*, p.83-84

see if they are heading in the same direction. "HANDCON" is just fine. Many of these NGOs must remain neutral—or at least appear that way. If your essential services line of operation calls for providing food, water and basic medical supplies/care to the people in a certain province, and some NGOs are already planning to work on that task—see how you can support them (without compromising their neutrality).

5. The military may play a supporting role. In typical fashion, the U.S. military is accustomed to taking the lead in intervention activities, regardless of the nature of the intervention problem. However, that is not necessarily the best way to proceed. Perhaps a civilian led intervention effort will best accomplish national objectives. Regardless of who is in charge, when hammering out the campaign architecture, the lines of operation in while the military traditionally takes the lead may be supporting efforts to one or more lines of operation which are more closely aligned with ultimate campaign success. The line of operation for governance is a good example. Often the development of a stable and functional government that can meet the needs of the people and ensure a sustainable peace is really the "game winner."

6. The emphasis will likely shift over time. The military likes to phase operations in a campaign—and then acknowledge that as the operation "matures," the operation moves into a different phase. Different phases call for a shift in emphasis on what is most important. This phenomenon is true regardless of whether or not the campaign is formally phased. This tendency for the environment to mature or evolve over time based on the interaction of the principle players should be an expectation that all planners share. Campaign planners would do well to try to anticipate and shape this evolution—and maintain the initiative by deliberately shifting the emphasis of their campaign architecture.

7. Use an Interagency lexicon. One of the biggest things that separates the military from their civilian agency planning partners is the lexicon that the military uses. However, the military is not alone in its use of a distinct or unique lexicon. Most agencies have their own lexicon. While much of this lexicon is not formalized in the fashion that the military does with doctrine, the language differences among agencies can make real communication difficult. Once the various agencies of government become more accustomed to working together, a sort of informal doctrine and related lexicon will likely come into existence. In the

meantime, the best thing that planners can do is avoid jargon and use "the King's English."

8. Use visible and invisible tools. There is a paradox in counterinsurgency theory that says "some of the best weapons do not shoot." People will naturally gravitate to obvious and highly visible options and responses within the context of a campaign. However, in the same way as in counterinsurgency theory, some of the best tools at the disposal of campaign planners are not physical—or even directly observable in their effect. In complex intervention activities which have such an admittedly political aspect, the virtual domain is often the most important one. Perceptions are often as important as reality—and the perceptions most important are those of the Host Nation's people. Even the very visible military tools may be played with a certain political savvy that they support the overall campaign.

9. Make the endstate description focused and achievable. Campaign planners will feel naturally compelled to set lofty goals for their campaign, and this tendency will often reflect in a description of a desired endstate that sounds like the campaign is bent on solving all the Host Nation's problems. Of course planners know better, but there are many competing demands that campaign planners will face even from the beginning that will often lead the campaign towards a propensity for "over-reaching." Sometimes this inclination comes from a failure to genuinely understand the nature of the problem and to align that with the U.S. national agenda for the intervention. In general, a few good questions to ask yourselves are: 1) Does this endstate description align with the campaign's raison d'être? 2) How will we know when we've arrived at this endstate? and 3) Is this endstate reasonably achievable given the practical realities of which we are aware?

10. Place emphasis on partnership beyond government agencies. As previously noted, we have to look beyond other government agencies for potential planning "partners." However, one of the entities we often overlook are members of the Host Nation government and even indigenous people who we can involve if we are wise in how we go about tapping into their talents. In a similar manner, campaign planners will need both a reach forward capability to access information from people "in country" even before the planners deploy. Upon deployment, the campaign planners will need a reach-back capability that is unlike anything recently employed. Expertise must be sought out wherever it

exists. That may mean looking to American private industry for knowledge of a topic or area.

Setting the Problem

Military campaign planners have a distinct proclivity to rush to solutions following a cursory analysis of their assigned mission. Unfortunately, though a bias for action is healthy, in this case, moving to pursue solutions before endeavoring honestly to understand the problem can short circuit the whole process—and have the campaign chasing objectives which, even if achieved, may not lead ultimately to campaign success. Invest the time in the beginning working to understand the problem. Admittedly this understanding is *aspirational.* Campaign planners will never have complete understanding and their level of understanding improves with time and exposure to the environment.

The Role of Dialogue

The need for campaign planners to engage in critical discussion, especially when they are formulating the basic logic of a campaign, may seem self evident. However, in practice, this critical discussion or dialogue is cursory in nature as most teams move rapidly in pursuit of solutions. Grappling with the problem and the related logic of the problem (and the logic and counter-logic of any proposed solution) may seem more akin to an academic drill. It is not. Dialogue is vital to collective discovery of the nature of a problem and in any solutions that might arise from an understanding of the problem. One question will always be: who should be involved in the dialogue? There is no distinct answer and the players involved will change over time as new stakeholders are identified and consulted—even made partners.

Operational Learning

Perhaps in an ideal world, understanding would be complete at the outset of an intervention campaign—even before a campaign, and planning could proceed without detours. The reality, as has already been noted, is that understanding is aspirational, something that evolves over time. The situation and environment change in relationship to, or as a result of, the injection of stimulus. A campaign becomes a journey of experimentation and discovery. The logic or hypothesis is constantly assessed and this assessment takes the form of learning. In this sense, the leader of the

campaign learns through his or her operations. Operational learning is an acknowledgement that a campaign's design, architecture, and emphasis will evolve over time—even adapt outright. This natural trait can be expressed as an ongoing *design—learn—redesign* process.

Tempo and Adaptation

Some authors have seen the utility of considering the tempo of operations when campaigns are contemplated and executed. Unfortunately, the form of tempo that some have come to associate with operations is one of speed relative to two or more adversary combatants. However, the form of tempo of most relevance here is one of rhythm—and this rhythm is not limited to hostile wills of combatants, but includes activities within the lines of operation selected. Campaign planners can establish a tempo among the lines of operation which has emphasis shifting in a fashion that always seeks to take advantage of the situation (normally to exploit success). This calls for adaptation at every level in response to the fruits of operational learning. Rigidity of a plan will likely interfere with the natural development and use of tempo during execution of a campaign. In an ideal sense, planning should facilitate the development of tempo—and this will call for campaign designs that are dynamic.

A Model for Design

In simplest form, campaign designers want to identify the problem or problems to be solved, establish the campaigns goals and intent for those goals (what we are going to do about the problem and a description of the future we are trying to create), and finally develop response options to realize these goals. The use of planning checklists can tend to constrain free and critical thinking. The example provided below is not intended to be used as a checklist, but simply a model for consideration—and not intended to bind up any thought. It is a demonstration of the chain of logic that planners will probably desire to go through in the development of an Inter-agency campaign design.

An Inter-agency design process example: (assumes standing/deployable Joint Inter-Agency Task Force)

1. **Intervention directive or guidance.** Campaign planners should receive an initiating directive or some sort of warning order—

something that will provide the genesis for planning an intervention campaign. Planners need to discuss this and make sure they understand what the campaign (even at the earliest stages of inception) will be expected to accomplish.

2. **Problem framed following critical discussion.** The campaign planners must work toward understanding the problem in the intervention environment. In order to do this, the planners will probably have to bring in outside expertise who can give general and specific information on the country (including culture, government, economics, violent actors, etc.) Planners need to establish context before they can continue with campaign design. The problem framing discussion is probably the most important step in design because it provides the critical foundation for understanding. Do not rush this step. The planners need to argue it out thoroughly so that the team can agree on a synthesis of the discussion which is the problem statement.

3. **Facts and assumptions discussed and listed.** Before planners start envisioning solutions in their minds to the problem(s), it is usually helpful to come to a common understanding of what the team knows (facts) and what the team cannot know or reasonably find out, but can assume to be true in order to continue with planning. These lists should not be extensive. The act of making the list helps planners to focus on the most salient issues to be addressed.

4. **Desired endstate developed.** Begin with the end in mind. Try to play it forward in your mind's eye and envision what the environment looks like when the intervention effort is complete. You may have to decide what "complete" is, but in most cases, it is probably a transition to Host Nation control. Envisioning the state of things at the "end" of your intervention allows planners to do *reverse planning*—which just means they decide what the future should look like and work to get to that future state.

5. **Goals and objectives established.** Once you know where you are and where you want to go, you can determine a way to get to your destination. Goals and objectives serve that purpose. These could be intermediate targets to shoot for—points at which a transition of emphasis is appropriate. These should be

kept fairly general. Planners should expect them to change once execution begins, due to operational learning and an environment that changes with new stimuli. This step is defining "the **what**" of the campaign design.

6. **Leader's Vision statement expressed.** The leader of the campaign design team, whether that man or woman is an ambassador or a military officer, needs to provide an intent statement that explains how he or she sees this campaign unfolding and lays out the purpose of envisioned activities. The emphasis is on the "**why**" of actions.

7. **Mission statement developed.** It is usually helpful, especially for people in agencies who will be required to lead various tasks, to have a succinct statement that describes the task and purpose of the campaign. This statement does not have to be anything fancy. It should address the who, what, when, where, and why of the campaign.

8. **Campaign architecture developed including selection of the desired logical lines of operation.** This step involves determining the aspects or elements of the campaign. These lines of logic are the framework for action. The campaign planners should also decide if one of the lines of operation is decisive. That is, they should ask themselves the question, "Is one of these lines singularly critical to the ultimate success of the entire campaign?" For instance, providing security for a populace may be an enabling function, but helping to establish a stable and reasonably capable government may be the decisive aspect of the campaign because without success in that line, you may determine that there can be no lasting stability (if that is your desired endstate). The campaign architecture represents the "**how**" of the design.

9. **Conditions, tasks and initial assessment criteria formulated for each LLO.** Once you decide on your LLOs, the next step is to set conditions for each line. You simply ask yourself, "What conditions should be present for success in this line?" Once you determine that, you can select tasks that relate to those conditions. Also, as previously noted, the campaign should place a priority on operational learning and one of the best initial

steps for this is to design in assessment criteria that are linked to the conditions. These can be voiced as a "How will we know when…" statement.

10. **Lead agency selected for each task with the LLOs.** The final step in the development of campaign architecture is to determine among the Inter-agency team who should take the lead for handling each task for each line of operation. For instance, you may have a line of operation called "Essential Services" and one of the conditions might be clean water availability to the people of a named province. The task would be to establish a means of generating potable water at the local level. An agency such as USAID might volunteer to lead that effort. The rest of the team will support as required.

Considerations for IA planners

- Gaining an understanding of the problem is vital (before campaign architecture is developed)
- The planning group will usually be in a rush to solutions—avoid this natural tendency
- Make sure you have the right organizations represented and that they have a role in the campaign design
- Avoid organizational lexicon or jargon in discussions
- The discussion on who has the lead for a task may be interesting as planners may be hesitant to sign their organizations up for a dominant role.

Some common mistakes in campaign planning[4]

- Attempting to predict or forecast events too far into the future
- Attempting to inject too much detail into the planning process—or more detail than conditions warrant

[4] MCDP 5, *Planning, p.23-25*

- Attempting to create a complex plan when a simple one will do

- Attempting to use planning as a scripting process to prescribe U.S. government actions—and even the actions of other players in the environment (who have their own independent wills)
- Attempting to institutionalize rigid planning methods and procedures

Concept Implications

- Need IA education for principal planners

- IA planners need to become accustomed to working together

- In some cases, standing Joint Inter-Agency Task Forces will be most effective

- Military education in the decision making process should be somewhat modified so that it includes the tenants of this concept

Summary

Although the U.S. has a long history of involvement in complex contingencies, the record of success is mixed at best. With each new conflict or intervention, the U.S. started "from scratch" and invented a new group to work Inter-agency coordination—instead of building and refining groups that were already formed. When even limited success in an intervention was achieved, it came through some sort of comprehensive campaign. In the Philippines in 1902 the US military performed most of the tasks—including what we today describe as stability operations or "nation building." In El Salvador, a small cadre of advisors and state department officials helped to positively influence the adversaries on both sides and worked very closely with President Jose Napoleon Duarte. President Duarte was able to find some political "middle ground" that under-cut the reasons for the rebellion in the first place, making the rebel cause less than relevant. History shows that the scale of the intervention is not the issue. Whether the campaign is large or small and whether it involves a small number of planners and advisors or numerous divisions of troops, the comprehensive campaign that is planned, executed, and coordinated by an IA team stands the best likelihood of ultimate success.

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Campaign Design Concept: Comprehensive Solutions for Complex Problems

By Captain Shane M. Long, USMC

Introduction

The United States Marine Corps and the United States armed forces writ large are arguably the finest crisis response force in history. The challenge is to ensure the United State's crisis response stays an enduring capability as the world's problems become exceedingly complex. As the world's problems become more complex, our capabilities must become more flexible and diverse.

Current doctrine needs to be expanded to include an expanded definition for a campaign and a refined method for developing comprehensive solutions to complex problems. Campaign Design is that process. Campaign design is the process that helps the USMC develop comprehensive solutions to complex problems by first defining the current problems, before engaging in problem solving. As a crisis emerges, the uniformed services need to embrace ideas that define the crisis' problems, and help construct a dynamic, comprehensive approach to crisis resolution.

Campaign design is about understanding and defining the problem that needs solving. Crises often present problems that have no easy answers. These challenges are so complex that they have no right or wrong answers, just better or worse solutions. Creating better circumstances or directing actions towards US interests may be all that can be achieved.

Current Marine Corps doctrine, such as MCDP 1 and MCDP 1-2, is a road map to solving these kinds of problems, calling for a comprehensive problem-defining and framing approach that produces comprehensive solutions. Most of the time, the uniformed services cannot develop or execute these solutions alone-nor should they be forced to try.

Definitions

In this paper the term **comprehensive** refers to the United States Government's (USG) employment of all elements of national power needed to reach a desired end state.

An **end state** is "what the national command authorities want the situation to be when operations conclude-both military operations, as well as those where the military is in support of other instruments of national power." [5]

Design team members are interested US uniformed service and civilian parties who are either full time or part time members of the design team.

Logical Lines of Operation (LLOs) are a society or country's generalized functional areas, segregated into distinct parts, to help the design team understand the country or area, and appropriately focus the necessary efforts to solve the problem. Six common LLOs are **governance**, **essential services**, **training and employing security forces**, **information operations**, **economic development** and **combat operations**. For a more detailed reference of LLOs, reference MCWP 3-24, Counterinsurgency (draft), chapter 5.

Campaigns Redefined

MCDP 1-2 defines a campaign as a "series of related military operations aimed at accomplishing a strategic or operational objective within a given time and space." [6]

This definition is strictly a military definition, aimed at solving military problems. Tomorrow's crisis will require a more comprehensive response, including civil and military elements, and requires an expanded definition. A proposed, expanded definition of ***campaign*** is:

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[5] Joint Publication 1-02, DOD Dictionary of Military and Associated Terms (12 April, 2001) pg. 145

[6] Marine Corps Combat Development Command, MCDP1-2, Campaigning (Department of the Navy, 1 August, 1997), p. 3.

A comprehensive series of disparate actions, using all necessary elements of national power, applied in a concerted effort to accomplish a desired end state.

Campaigns are not strictly military endeavors, and may encompass little military action at all. The USMC's past crisis response efforts in South West Asia, Jakarta, and Africa demonstrate that the military plays a vital role in engagement and intervention efforts, but military action is not the sole effort. Military personnel may not be the campaign's main effort or involved at all as explained below.

> *". . . war is simply a continuation of political intercourse, with the addition of other means. We deliberately use the phrase 'with the addition of other means' because we also want to make it clear that war in itself does not suspend political intercourse or change it into something entirely different. In essentials that intercourse continues, irrespective of the means it employs. The main lines along which military events progress, and to which they are restricted, are political lines that continue throughout the war into the subsequent peace. How could it be otherwise?"* [7]

Campaigns are often protracted, messy ventures, for which source problems and focus must constantly be reassessed. Successful campaigns continually evolve as the intervention evolves and ideally leads to the defined end state.

We believe that a campaign is not conducted in a vacuum, nor is a campaign a series of tactical actions, strung together, achieving some strategic goal, while some would argue otherwise. Campaigns combine all the elements of military power **with** the other necessary elements of national power to achieve the end state. Clausewitz said "*…war is nothing but the continuation of policy with other means."*[8] To this end, it is necessary to employ all elements of national power in a concerted effort in order to develop and execute comprehensive solutions to complex problems.

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[7] *Carl von Clausewitz, On War*, edited and translated by Michael Howard and Peter Paret (Princeton, New Jersey, Princeton university Press, 1976), p. 69. Ibid., p. 605

[8] *Ibid., p. 605*

Military Problem

The United States Marine Corps needs a more refined method for developing comprehensive solutions to complex problems. Additionally, current United States Marine Corps' doctrine needs to include an expanded definition of campaign beyond the current military definition.

Central Idea

Complex problems require a comprehensive, interagency solution that addresses all necessary facets of a problem. Campaign design is the process that helps the USMC develop comprehensive solutions to complex problems through problem definition. Current doctrine and methods lend a basic road map, but tend to center on military solutions to military problems. Current methods are not sufficient to tackle tomorrow's complex problems and emerging characters.

The following is a basic explanation of how the campaign design process can help military personnel work with civilian and coalition organizations, to define problems and find solutions to complex issues.

Study of the Problem

Before USG agencies and forces attempt to solve a nation's or troubled region's problems, they must first divine the true problem and roots. Problems, like weeds, must be separated from healthy plants or they will surely spread and destroy the field.

The **campaign design process** allows campaign designers to study the problem comprehensively, and tries to frame or describe the problem in an intelligible manner**.** Campaign Design helps campaign designers discover, understand and comprehend the nature of problems, its causes and potential ramifications so effective solutions can be found. Plainly spoken, campaign design is problem defining.

The well-designed campaign has taken into account all aspects of the issue, determined the problem, so the planners can employ the aspects of national power throughout the systems comprehensively, vice seeing the campaign in separately phased, distinct actions. The design group cannot isolate one area or system in the study of a particular problem. It is important in the design process, that the design team study a country or

area in its entirety, continually aspiring to understand the problem to the best of their ability and describing the problem in the plain, straight forward terms.

Through the campaign designer's discussion, the design group subjectively examines the area and issues in a comprehensive manner. The campaign designers look at the affected areas in reference to the all of the issues versus all the necessary elements of national power, thus creating a more efficient and well rounded campaign. Campaign designers continue to work throughout the planning process and throughout execution, constantly refining the design through constant assessment and learning.

U.S. Campaign Design in the Philippines 1898-1913

From 1898 through 1913, the US occupation of the Philippines was primarily focused upon quelling various insurrections throughout the Archipelago. For the first several years of occupation, the US did not have a clear picture of our mission, causing confusion to the US occupying forces and Filipino residents.

As Philippine nationalists fought for independence, their protracted struggle, based on Cuban guerrilla tactics, proved relatively effective. Nationalist guerrillas established local bases, where the guerrilla's drew support, aid and shelter. Moreover, they fed the local population's grievances with rhetoric and promises of a better way. The only problem was the guerrilla message was different from town to town, province to province and the local population did not care about political change as much as they cared about land reform, decaying infrastructure, no schools, or government repression or indifference.

As the Guerrilla's tactics increased, the US Army evaluated its position in the Philippines and planned an effective campaign based upon promoting its virtues while isolating the rebel's message from the people. The US Army focused the skills of its forces on cultural sensitivity, diplomacy and civic engineering. Vice solely focusing upon combat operations, the Army began to build roads, schools, teach classes, lend health care and immunizations to isolated areas and shore up economic infrastructure. The US divided the country into districts and gave the governors and commanders great power, understanding that the tactics used in one area, may not be effective in

another. Through these means the US sought to isolate the population from the rebels by meeting their list of grievances.

The US enacted its campaign, which combated the rebels by inculcating local peoples that the civil administration had the answers and cared. The campaign accomplished the following key milestones; established civil government, established civil and administrative networks, established local and provincial intelligence services, established local constabulary and auxiliaries, performed land and government reform, built roads, schools and infrastructure and strengthened government in rural areas.

The results of these efforts settled the grievances in the eyes of the people and led to guerrillas being driven from their native areas. Once out of their home areas, rebels were hunted down by constabulary, auxiliaries or the local population. Guerrillas not driven from their native land often turned to banditry for survival. As a result the Guerrillas lost the support of the local populace and were hunted down. By 1913, Philippine insurrection was all but wiped out, due to a concerted campaign across multiple areas. [9]

Key Elements of Campaign Design

Key elements that shape campaign design are critical **discussion**, **logical lines of operation** (LLO), **full spectrum learning**, **understanding**, **assessment, learning**, **initiative**, **adaptation**, and **tempo**. These elements, employed in a concerted manner, lend campaign design its comprehensive nature.

Discussion

Critical discussion, or dialogue, is the vehicle behind campaign design. The campaign designer's discussion is led by a senior facilitator who guides conversation and meets administrative needs. The facilitator does not dictate or dominate the discussion. The design group should have members from every necessary organization, both military and civilian. The design group should not be structured on rank or position, but must revolve around the merit of ideas.

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[9] The U.S. Army and Counterinsurgency in the Philippine War 1899-1903, Dr. Brian Linn, (UNC Press, Chapel Hill, NC, 1989)

When able, it is preferred that the design team and planning cells, both working throughout execution, be separate entities, keeping ideas fresh and avoiding collusion of the design and planning process. This may not be realistic in all situations. The design team and the planning team may have some membership overlap or be one in the same due to constraints in manpower. Nevertheless, the design function must stay separate from the planning process.

As stated above, it is preferable that the design team is a stand-alone organization, but that is not realistic in most circumstances. This setting will help the campaign designs maintain a more open dialogue throughout the design process. Through out execution, the designers constantly lend refinements and guide the campaign's focus.

City Planning as Campaign Design

The design process uses dialogue as the vehicle for change and can be likened to city planning. City planning is a complex, never ending endeavor, taking into account dynamic systems, figuring out complex problems in the best interests of the city's residents. Campaign design is much the same. The campaign designers are the City Planners. The campaign designers are the residents, city and commercial interests.

The City Planners must first divine the problems in a city in order to decide necessary refinements or future milestones. The problems might range from mismanagement, racial tensions to infrastructure decay or equal parts of all of these problems. Through dialogue with the city's residents, leaders, and investors, the City Planners divine the problems and issues. The city planners take into account all aspects of the city; economic strength, racial make up, neighborhood profiles, transportation and utility infrastructure.

Through dialogue, ideas are constantly refined, refocused, and the City Planners design a campaign derived from the vision of the patrons and residents. Once the problems and roots are uncovered, the planners can begin to offer solutions. The planners will attack the problems holistically, enabling simultaneously diverse actions such as revised law enforcement tactics, refurbishment of poverty stricken neighborhoods, infrastructure development, investments and increased business opportunities. Though out the execution, the city planners engage in continuous dialogue with the residents, business and city leaders, refining the vision and design over time, as events unfold and the city changes.

Logical Lines of Operation

Complex crisis response requires activities to engage multiple systems and logical lines of operation (LLO's) in an effortless a fashion. LLO's are functional areas, that impact a system or area greatest and allow it to function. Intervening organizations must work through these lines of operation to positively affect and influence as many aspects of a system as possible in a dynamic fashion. LLO's do not exist in a vacuum, but in the midst of other established systems such as ethnic, cultural, national, regional or religious systems.

As listed above, six common LLO's that encapsulate and generalize the functions necessary for a country to successfully operate are **governance**, **essential services**, **training and employing security forces**, **information operations**, **economic development** and **combat operations**. LLO's are not mutually exclusive because not all societies have all of the listed systems and some may have more specific LLO's than those listed.

No actions can be taken in one LLO or system, without affecting other areas. Additionally, systems cannot be deconstructed and studied independently with the hope of understanding its operation. Rather, the problem must be studied and derived in context of the whole, in order to get a true vision of how the problem relates to the systems and other LLOs.

Full Spectrum Learning

The design process can be viewed as an experiment and its solution as the **hypothesis** to be tested. Throughout the process, the campaign designers **understand** and **diagnose** the problem by gathering information, engage in **discussion**, discover the problem, **design** the campaign, assess the **campaign's** success or failure, **learn** from the campaign's **implementation**, **redesign** and continue to refine the campaign through constant **assessment**. Full spectrum learning allows the design team to work across all the LLO's to develop a comprehensively designed campaign. This full spectrum learning process is continuous throughout execution until the final end state is reached.

As the hypothesis is validated or discredited, the designers redesign and implement solutions through the design group's discussion. Moreover, the refinements offered by the designers may include transforming the milestones or end state itself as needed.

Full Spectrum Learning Process

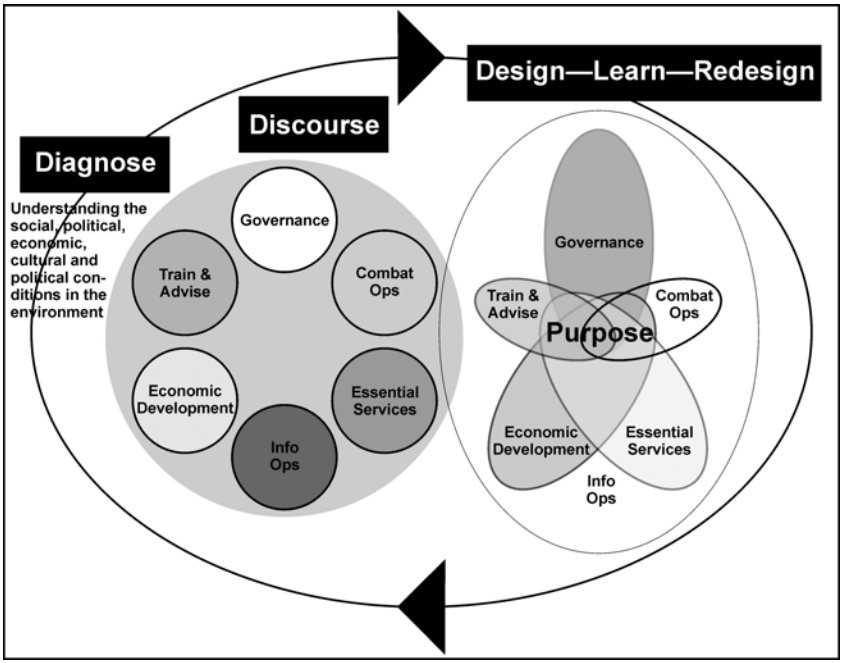

Figure 1 demonstrates the full spectrum learning model that illustrates how aspirational learning begats the continuous process of Operational learning. Note the six LLOs on the left have equal attention in the problem's beginning. In reference to the picture on the right, as the campaign's design takes shape through discussion, the problem is better understood and defined. The LLOs are proportioned in context to the problem.

Adjusting the milestones or end state is not "mission creep," but rather it is **adaptation** to the problem in an ever changing environment. The design group must pay special attention that the solution and end state solves the problem when during adaptation. Every time the campaign's coordinated activities act in a system, against an enemy, the environment and dynamic changes. The systems conversely, adapt, as influence is

levied. Therefore, campaign designers must adapt the campaign components accordingly within the bounds of the National Command Authority's guidance.

Understanding the Problem

When the design group studies the systems and aspires to discover the problem, it engages in learning. The campaign designers are initially guided through the problem by their **understanding** of the problem from the first snapshots of available information. The stakeholder's base their initial ideas on those first perceptions of the problem and perceived goals for resolution, based upon observation, facts at hand and assumptions. Through this learning process, the campaign designers gather more information, determine and define the problems, and decide upon which systems to focus attention. This initial learning and understanding carry the group through the design process and transforms into operational learning as the design is planned in greater depth and implemented.

Assessment

Assessment enables re-design. Assessment is a learning activity inseparably linked to campaign design. Once the solution is implemented, the designers immediately begin assessing the resulting actions to **learn**, and **redesign** the campaign.

Assessment enables learning and greater understanding. The action of assessment is not itself understanding. Assessment is the stakeholder's conduit to learning and subsequent pathway to understanding.

Assessment is continuous learning through discovery that occurs throughout the campaign's execution. Constant assessment of the campaign's actions allows the designers to determine success or failure and implement necessary improvements. Assessment acknowledges the complex inter-relationship of various stimuli, examines the inter-relationships of the activities and how these activities influence one another.

Assessment also acts as a harmonizing function that promotes unity of purpose throughout the campaign. Through assessment, the design team is able to determine success at multiple levels, allowing redesign to

ensure that all assets are continuing to work towards the same end state. Assessment has both a horizontal aspect and a vertical aspect. This means that the design team openly communicates with both higher and subordinate organizations. Additionally, the design team converses horizontally, or laterally, with co-equal organizations to sharing and gather information and to de-conflict their efforts.

Learning from Operational Actions

The group's initial understanding evolves as it learns from the operational successes or failures of our implemented plans. As stated earlier, operational learning is the process of implementing the campaign's initiatives, like adding stimulus into the system, learning from the results through assessment and implementing changes as needed in order to learn from the resulting action. Campaign design does not stop, but rather carries on through the campaign's execution.

Through continued operational assessment, the designers observe the success or failure of the campaign's elements, and through a process of operational learning, they update their understanding of the problem. The campaign designers continually update, and reengineer their vision to streamline the campaign's execution. The campaign designers decide to add more energy and subtract energy from systems as needed, but all the while through a constant dialogue, assess the campaign's design, redesign to bring victory.

Initiative

Initiative is campaign design's driving force. The designers desire to constantly assess their position, actions and redesign, sets the tempo for the campaign. The designers continue to maintain their agenda in regards to the enemy and adversarial actors. They are always on the offensive, causing the enemy to react to their actions and stimulus. The more efficiently the design team can establish the design, learn, redesign process, the more effective the campaign will be.

Adaptation

Adaptation is the design team's intentional evolving of the campaign's design to maintain the initiative against adversarial actors. As the design team establishes a rhythm of activities across the various lines of

operation, the opponent is forced to react to these "offensive" actions. This adversary reaction involves putting its resources (time, effort, money, forces) into adjusting or adapting in its own right. If our rhythm is productive, the adversary's actions will become less relevant over time. Adaptation is directly related to establishing and maintaining tempo.

Tempo

The stakeholder's initiative to take action is the key to developing the campaign's **tempo.** Tempo is not acting in a reckless manner to be faster than the enemy. Rather, "speed and time create tempo…only in relation to that of the enemy,"[10] and this tempo is a rhythm of adaptation. Tempo is not limited to one activity. In fact, the designers seek to build tempo across all logical lines of operation vice one area to develop and maintain a comprehensive campaign. The design process is driven by the designer's relentless desire to seek the initiative by learning, assessing and implementing redesign. *"The ability to operate at a faster tempo or rhythm than an adversary enables one to fold adversary back inside himself so that he can neither appreciate nor keep-up with what's going on."* [11]

Summary

Complex problems require a comprehensive, interagency solution that addresses all necessary facets of a problem. Campaign design is the process that helps the USMC to develop comprehensive solutions to complex problems through problem definition. Current doctrine and methods lend a basic road map, but tend to center on military solutions to military problems. Current methods are not sufficient to tackle tomorrow's complex problems and emerging characters. As crises emerge, the uniformed services need to embrace ideas that define a crisis' problems, and help construct a dynamic, comprehensive approach to crisis resolution. Additionally, current doctrine needs to be expanded to include a more complete definition for campaign and a refined method for developing comprehensive solutions to complex problems.

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[10] Marine Corps Combat Development Command, MCDP 1-0, *Operations* (Department of the Navy, Sept 2001), p. 6-38-39

[11] *Patterns of Conflict*, John Boyd, (John Boyd, December, 1986)

Rethinking the Marine Corps Planning Process *Campaign Design for the Long War*

By Steven A. Hardesty

Executive Summary

The Marine Corps Planning Process (MCPP) is sound, but experience in Iraq has persuaded many Marines that the way in which we apply MCPP is inadequate to deal with the global long war in which we are engaged. They believe that MCPP too often is applied in a mechanistic manner – a check list style that tends to negate the flexible and holistic approach that MCPP offers. Templates can be useful guides, particularly when planning time is short. But too often they encourage standardized responses when we need creative and broad-ranging approaches to the many state and non-state enemies we confront today, especially as many of those enemies have learned to leverage new communications technology to inspire or coordinate rapid, multiple, dispersed attacks on us, our friends and interests across the globe. We need a new conceptual framework for how to approach, apply, and teach MCPP. A part of that new thinking needs to include adding to MCPP a campaign design element and greater appreciation of the need to integrate into the planning process the non-military aspects of DIME. In this way, we can confirm MCPP's enduring value and update it for the 21st century environment.

Purpose

This paper proposes a new way to think about MCPP and updates to MCPP, focusing on those elements – tenets, Mission Analysis, and Courses of Action development – where revising is most urgently needed and will have the greatest effect on the entire planning process. These proposals allow MCPP better to support the USG interagency – meaning all of U.S. Government – planning process, of which MCPP is a subordinate part.

Introduction

The path to victory in war has not changed since the first caveman lifted a club – out-think your enemy. Our enemies at the beginning of the 21st century are clever, vigorous, and technologically savvy men and women, often fired by a Western-hating fanaticism that makes them extremely difficult to divert or defeat. They have learned how to manipulate weak and failing states (al-Qaeda in Afghanistan), how to use irregular warfare (the Iraqi insurgency), and how to manage the hot new technologies of rapid communication (the jihad movement) to organize themselves to threaten us and our friends overseas. They use new communications technology to apply against us every tool they can find, from public opinion (in the Islamic world) through economic leverage (seeking to upset the world oil market) to information (videotaped threats and beheadings of hostages). To beat these enemies, we need to be agile and creative in finding means to strike them in diverse and unexpected ways. We need to out-think them. The Marine Corps Planning Process is the place to begin.

In Marine Corps doctrinal publications and the *Marine Corps Planning Process* (MCWP 5-1) and *Planning* (MCDP 5), we have as our guide the distilled wisdom of the generations of Marines who have gone before. The guidance is sound and points the way toward finding a comprehensive – and not always military – solution to meeting threats to the U.S. and to achieving U.S. objectives. Our problems in Iraq have convinced many Marines that, too often, we apply MCPP in a mechanistic manner that does not consider all of the many interrelated and interdependent aspects of what has become a global battlespace for the long war. Iraq also shows the critical importance to U.S. objectives of our applying in combination all of the tools of U.S. national power – the DIME elements of diplomatic, information, military, and economic power. By integrating into planning the civilian parts of DIME with the military, we can shape campaigns that have a multi-front, holistic quality capable of defeating our enemies. To do that, we must think about, teach, and use MCPP more broadly, and some parts of MCPP need to be updated for the 21st century environment of the long war.

The Problem

Marines report that too many of their fellows, as commanders or members of Operations Planning Teams (OPT), make only a cursory

Mission Analysis as called for in MCPP, move rapidly to Courses of Action (COA) development, and shove through Wargaming to get to Issuance of Orders, all without giving the conflict they face the in-depth study needed to promote mission success. They do this in good part, Marines say, because that is they way they have been trained. Speed to action is praiseworthy. But out-thinking the enemy by a comprehensive and deliberative analysis of the problem and of potential COAs, in all of their ramifications, offers a better chance of success. It is true that all planning is time-dependent and that short cuts have to be taken in some circumstances. But even the need for urgent action should not cancel thoughtful analysis. Skipping the analysis called for in MCPP is to hobble campaign planning.

The Solution

MCPP is and should remain the foundation for how Marines think about campaign planning. It is a flexible tool that contains the guidance we need for the long war. But, like the sturdy U.S. Constitution, which has been amended 27 times to meet changed circumstances, MCPP needs to be understood and updated in light of current conditions. It particularly needs to include a campaign design component and describe thorough integration of DIME elements. It does not need to be rewritten or replaced but re-thought. What follows is a rethinking of MCPP to highlight its ability to meet today's needs, along with recommendations for updating.

Rethinking MCPP - *The Tenets*

The three tenets of MCPP – *top-down planning*, *single-battle concept*, and *integrated planning* – remain sound. Their view that events in the battlespace must come out of the commander's vision of the situation and how to shape it to his advantage, his understanding that each event in the battlespace contributes to an interrelated whole, and the requirement for integration of design, planning, and implementation are correct for this or any other time of war. Alexander and Napoleon would recognize them. Reading the tenets in light of the long war requires only that we expand our understanding of these fundamentals in the ways described below.

Top-Down Planning

> *Planning is a fundamental responsibility of command.*
> --MCWP 5-1, Sec. 1001(a)

What is new for the commander in the long war, and what was common for Marines fighting the "small wars" before 1945, is the understanding that preparing a campaign is not just about combat. It is about preparing to win over to the U.S. side the people among whom the conflict is fought. Only by winning the hearts and minds of the people in the conflict zone can we expect to achieve a sustainable victory. For that reason, we need to open the aperture on MCPP to

- *Balance the military element of planning with the non-military elements of DIME,* using that balance to establish MCPP as a broader support to a campaign design process that integrates the efforts of all USG military and civilian agencies into an interagency process that includes all of the elements of national power.

- *Establish campaign design as an integral part of MCPP* that precedes planning. Campaign design is the broad yet detailed thinking that needs to precede Mission Analysis. It aims to see a problem and the circumstances in which it is embedded as a whole made up of interrelated and interdependent parts that are individually and collectively manipulable. Campaign design should be incorporated into the work of the OPT.

Balancing the DIME Elements

There are many ways besides combat to defeat an enemy. In a number of their most recent publications, the Marines and Army describe how a holistic, DIME approach can do the job with potential for fewer U.S. casualties, less collateral loss of life and damage, and less ill-feeling in the population among whom the war is waged, all leading toward a sustainable mission success. As described in the *Multi-Service Concept for Irregular Warfare* (published August 2006) and the *COIN Manual* (published June 2006), an enemy can be as effectively neutralized or beaten by economic warfare that cuts off his sources of funding or by an information operation that pulls the rug from under his popularity as by decisive combat. A commander using a mix of DIME elements,

judiciously balanced, can produce a campaign that achieves its mission effectively and efficiently, delivering a victory that can be sustained for the long-term. A sustainable victory is one in which the U.S. does not need to fight that fight again.

All of these factors, writ large, also describe the interagency campaign design process. MCPP is subordinate to that process, and these same factors describe how a commander and OPT should prepare a campaign to support national objectives. Just how the DIME elements are applied and inter-related will be discussed below, in Courses of Action Development.

This careful balancing of national power elements must be informed and temporized by the commander's full understanding of the nature and character of the conflict and of its participants. MCPP expects the commander and the OPT to gain this knowledge from subject matter experts recruited for the task. Here, MCPP guidance needs to be looked at more broadly. From the beginning of deliberations toward DIME integration, the commander must add to the OPT the advice and collaboration of two essential players:

- ***USG and other civilian experts*** who represent the non-military aspects of DIME and can contribute toward a broad-based campaign plan. This group should include representatives of our multi-national partners and of nongovernmental, international, and private voluntary organizations that have workers on the ground in the conflict zone.

- ***People native to the conflict zone*** who can provide the commander the local people's understanding of the problem, the local mores that may impinge on the commander's planned action, and a balance to ideas proposed by non-native advisors.

Only a mix of thoughtful opinion, acquired from a range of subject matter experts and knowledgeable people native to the area, can help the commander grasp the situation. Top-down planning requires bottom-up understanding as well as bottom-up input.

Integrating Campaign Design

> *The commander uses his operational design to visualize, describe, and direct those actions necessary to…accomplish his assigned mission.*
> --MCDP 1-0 *Marine Corps Operations*, Sec. 6-3

Campaign design, according to MCDP 1-0, translates operational requirements into tactical guidance. Fundamentally, it represents the heavy intellectual work of understanding the problem in all of its aspects and of understanding the intended and potential unintended consequences of action. Today, design is seen as limited to the joint planning/interagency level. But design is too valuable a tool for a commander not to be integrated into MCPP, as well, and into the work of the OPT. Design provides a means to analyze the problem to frame the commander's understanding and reveals the inter-relationships and interdependencies among the parts and players to help the commander in targeting DIME elements. This addition to MCPP makes explicit what now is only implied in Mission Analysis – that campaign design must precede planning.

Two qualities are at the core of campaign design. First, design is about understanding the problems presented by the enemy and the environment in which the enemy is embedded. By "enemy," we mean all of the many very different enemies that may operate in the conflict zone. "Environment" represents not just the terrain but the people resident in the conflict zone, with their politics, culture, economics, mores, and society. Second, campaign design is about achieving the highest possible order of situational awareness of all of these factors and then transforming awareness into a design of how the campaign should proceed. It is about

- Seeing a problem and the circumstances in which it is embedded as a whole

- Developing a comprehensive and accurate understanding of all of the implications in the problem, environment, and players

- Developing a clear assessment of the interrelationships and interdependencies among all of the pieces that comprise the problem

Design looks at a problem holistically, as a surgeon must consider the whole condition of a patient before surgery, weighing and balancing each possible action against those consequences that are certain and those that are remote or unexpected. The holistic approach inherent in design can identify more efficient ways to attack an enemy, with all of the military and non-military tools available to a commander. It can show where pressure – military or other – can be applied at least cost on a seemingly insignificant point to cause reverberations through the environment to achieve a large effect elsewhere. It also allows the commander to anticipate ways in which a seemingly insignificant aspect of the picture presented by the enemy and/or the environment can expand to stymie the commander's efforts.

Good design can be the foundation of good planning and should not merely be implied in Mission Analysis but explicitly required of the commander.

Single-Battle Concept

> *Operations or events in one part of the battlespace may have profound and often unintended effects on other areas and events...*
>
> --MCWP 5-1, Sec. 1001(b)

In saying that all events in a battlespace are interrelated and interdependent and that every relationship must be taken into account, MCWP 5-1 says that a commander and his staff must see a problem and the circumstances in which it is embedded as a whole. The enemy will use his own array of power elements – combat, economic, political, public relations, etc. – to defeat the U.S. effort. Those enemy elements must be neutralized or destroyed by direct or asymmetric response. For that reason, "single-battle" cannot mean merely the organization and maneuver of combat and support elements across a battlespace but the organization and maneuver – in real and virtual terms – of all of the DIME elements which the commander, within resource limitations, can bring to bear to defeat the enemy.

The commander and OPT must see the problem as comprised of interrelated, interdependent parts that are individually and collectively manipulable. By taking this larger view of balance and imbalance in interrelated elements – by thinking of the problem and all of its component parts like a mobile that must be readjusted continuously as

breeze and dust act on it – this holistic approach can show where combat power can be most effective, where it needs to be augmented by other capabilities, and where it ought to be replaced by other DIME elements more likely to achieve U.S. objectives.

Organizing and applying to the single-battle concept the non-military aspects of DIME can be a difficult challenge for a commander. Higher levels may be unable, for logistical, political or other reasons, to support the commander's proposals for DIME application. In which case, the commander needs to revise his proposals. The commander may not have the authority to order USG civilian, multi-national partner, host nation element or nongovernmental agencies or personnel to act in accord with the commander's instructions. In which case, the commander needs to apply the skills necessary to winning voluntary support. These and other similar problems, however, are balanced by the commander's not needing to fulfill a non-military DIME activity but merely to get it started. Often, the commander's laying the foundations for civilian agencies to follow and build on is sufficient to meet the commander's immediate objectives.

Integrated Planning

> *Integrated planning is a disciplined approach to planning that is systematic, coordinated, and thorough.*
>
> --MCWP 5-1, Sec. 1001(c)

Integrated planning, according to MCWP 5-1, is a means "to consider all relevant factors, reduce omissions, and share information across all the warfighting functions."

High order activities – such as "economic warfare," "political warfare," "infrastructure warfare," and "information and intelligence warfare" – undertaken at the joint/interagency level are reflected at the commander's level in DIME. Here, the commander must integrate DIME's non-military aspects into support of the warfighting functions. However, the commander may decide to use these non-military elements as the supported rather than supporting activity. This effectively elevates DIME's non-military elements to semi-warfighting functions. That may seem a radical thing to suggest. But looking at diplomacy, information, and economics in this light shows the flexibility built into MCPP and

encourages the commander and OPT to be inventive in working with all available tools.

It is from among these non-military functions that advisors from U.S. Government civilian agencies, multi-national partners, host nation elements, and other organizations can provide the commander a sound understanding of the local situation and revise that understanding rapidly to meet changes in the DIME environment. Out of this advice, these subject matter experts – on the scene with the commander and as on-call experts in the U.S. and in partner nations – can offer analysis of proposed Courses of Action as they may affect the situation beyond purely immediate combat action, and help game the commander's options. These representatives also can report this data to their home agencies to encourage greater understanding of the commander's actions and greater support for the commander. In particular, USG representatives can project for the commander – in the holistic context already described – ways in which the use of DIME's non-military elements can so augment or replace combat action as to speed mission accomplishment while reducing U.S. casualties, conserving U.S. forces, and winning the hearts and minds of the local population.

Rethinking MCPP - *The Process*

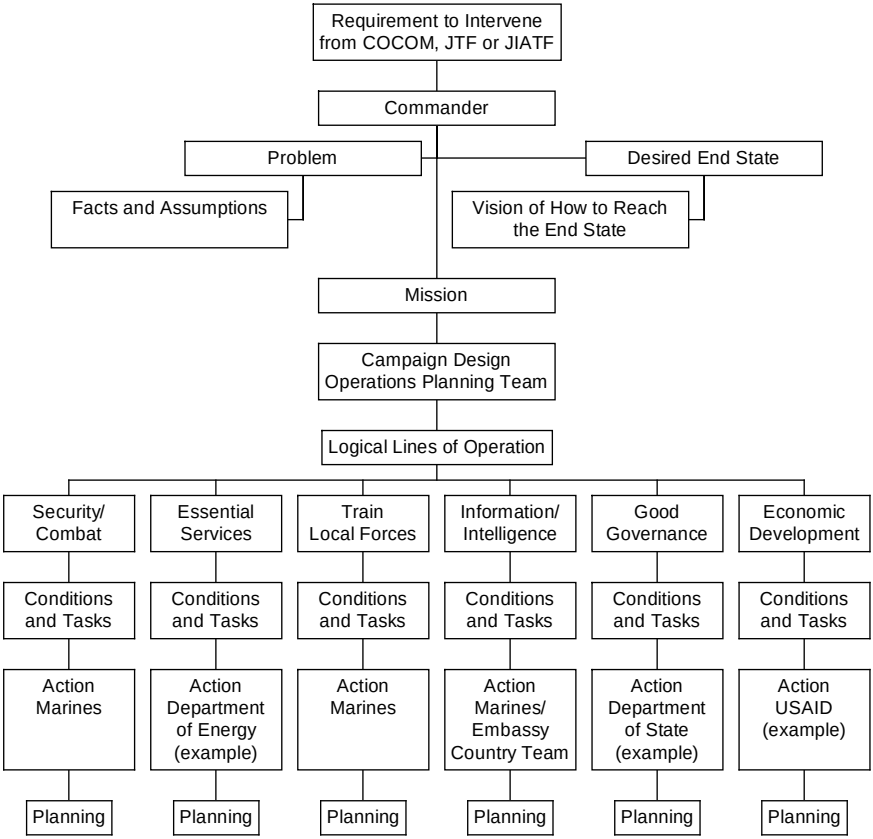
The six steps in the planning process – *mission analysis, course of action development with war gaming and COA comparison and decision, orders development, and transition* – also remain sound. However, Marine veterans of Iraq and Afghanistan have begun to express their concern that current Marine Corps training and practice have squeezed these steps into unnecessarily narrow molds. They want to see that trend reversed. They believe that Marines no longer should think of the process as a routine of six consecutive steps to a result.

A careful reading of MCWP 5-1, however, shows that MCPP offers the kind of flexibility that these Marines want. MCWP 5-1 describes the process more in terms of six developmental stages, rather than steps, that are progressive in nature yet interwoven, overlapping, and often falling back on one another as information-gathering, analysis, and weighing of alternatives reveal problems that call for more information-gathering and analysis or which point out unexpected options. Many Marines report that MCPP is not taught that way but taught as a check list to be performed, a mechanistic approach that undercuts MCPP's inherent

flexibility. Applying MCPP as it was meant to be applied – with creativity, intelligence, sound judgment, and watchfulness for the unexpected option – will defeat our enemies.

The graphic that follows is an introduction to the first two stages of the process, the subjects of the rest of this paper. Mission Analysis is the top half of the chart and COA Development that portion below Campaign Design. The graphic shows the broad range of combat and non-combat considerations necessary to preparing and implementing a successful operation. This diagram is not meant to be prescriptive or a template but an outline of the process. The number of logical lines of operation described is for example only – a commander may determine that circumstances call for more or fewer lines.

Mission Analysis and COA Development



Mission Analysis

> *The commander's battlespace area evaluation is the commander's personal vision based on his understanding of the mission, the battlespace, and the enemy.*
>
> -- MCWP 5-1, Sec. 2001(a)(1)

Mission Analysis is about building situational awareness. Conversations among Marines suggest that this purpose is poorly stated in MCWP 5-1. The text, they report, tends to drive commanders straight to development of a Mission Statement without their giving sufficient attention to gaining understanding of the problem. It is here that the integration of design into MCPP must be made explicit to help the commander achieve a high order understanding of the problem and its environment.

Mission Analysis is about more than just producing a unit mission statement. A commander and OPT cannot afford to focus on the output – the statement – and rush through the analytic work that invests the statement with meaning. The fault appears to lie in a habit of mind, likely encouraged by the way that MCPP is taught, that shorts problem analysis in favor of planning. MCWP 5-1, in Mission Analysis, calls for Marines to "review and analyze orders, guidance, and other information" to produce a unit mission statement that conforms to the CBAE. This is a very broad requirement, demanding development and analysis of information covering everything in the conflict zone that can have an effect on U.S. objectives. It is an implicit call for campaign design.

In preparing a campaign and the plans that support it, designers and planners must

- Apply their knowledge of all of the DIME elements and of the limits of those elements and how they can be integrated to greatest effect. USG civilian agency experts need to be included on the design and planning teams.

- Develop an understanding of the problem, the players, and the environment in which problem and players are embedded, in all of their complexity.

- Go outside the circle of military and USG civilian agency and multi-national partner advisors to seek advice from people who

are native to and knowledgeable about conditions in the conflict zone.

- Identify the key problem and determine how it is structured, how it fits into the local environment, how it relates to all players, and how it impacts on and is impacted by shifts in players and environment.

At this point in Mission Analysis, the campaign design and planning team can provide the commander with sufficient understanding of the battlespace to allow the commander to determine the campaign's desired end state and to describe how to get there.

Now the commander is able to issue the Mission Statement and the design and planning team can move to the task of COA development.

Course of Action Development

> *When I took a decision or adopted an alternative – it was after studying every relevant – and many an irrelevant – factor. Geography, tribal structure, religion, social customs, language, appetites, standards – all were at my finger ends.*
>
> --T. E. Lawrence, 1933

Courses of Action themselves should not be thought of as solutions to the problem but as responses to a problem. There can be many responses that individually chip away at a problem until their collective effort achieves the objective. Thinking of COAs as responses rather than solutions means that we are not tempted to throw everything we have at every problem. Instead, we can tailor a response, limiting risk in lives, collateral damage, and cost, and holding back forces to meet unexpected contingencies. In current practice, an OPT seeks to provide a commander with three COAs from among which the commander chooses pieces for the OPT to reassemble into a single COA. However, a design process that assesses and balances all of the DIME elements and includes advice from a wide range of experts, including those native to the conflict zone, may need to produce only a single COA, one detailed in the logical lines of operation.

Essential to development of a COA is seeing the problem presented by the enemy both in its "big picture" and in its brushstrokes. Logical lines

of operation (LOO) guide the commander to do that, not only in design and planning but in campaign implementation. LOOs are about seeing the inter-relationships among elements of a problem and acting on those relationships to unbalance or rebalance the problem, as the commander requires to accomplish the mission. LOOs "help commanders visualize how military means can support nonmilitary instruments of national power" (JP-03, *Doctrine for Joint Operations*). As described in the *Multi-Service Concept for Irregular Warfare* and other texts, there are a half dozen LOOs that generally can be applied to most conflicts.

1. ***Information/Intelligence*** – public relations, intelligence, and the closest collaboration with the appropriate host nation element in the conflict zone

2. ***Essential services*** – helping the local people to restore or provide water, electricity, sewerage, medical care, infrastructure, and more

3. ***Train and employ local security and defense forces*** – showing the people in a conflict zone how best to protect themselves from insurgents, invaders, and criminals

4. ***Combat*** – helping the local people to get the upper hand against their enemies

5. ***Governance*** – helping the local people to restore or establish a government that meets their needs as they see them

6. ***Economic development*** – helping the local people to move toward the economic stability that can prevent the popular grievances or other problems that would require the U.S. to rejoin conflict in this area

LOOs are creative tools for guiding design and planning and for efficient channeling of effort in campaign implementation. By shifting emphasis among the lines of operation, we can keep an enemy off-balance and generate flexibility and popular support for ourselves.

Last Steps in the Process

With development of COAs, the commander and OPT then can work through Course of Action Wargaming with Comparison and Decision – which, if a single COA is chosen, can be LOO wargaming with comparison and decision – and Orders Development and Transition.

Conclusion

MCPP, with its venerable tradition of effective support of Marine operations, needs to be brought into the environment of the long war. MCPP does not require wholesale revision nor should it be replaced. It is a comprehensive and flexible process to which Marines need to bring a 21st century understanding as they seek to apply MCPP.

Commander's Handbook for an Effects-Based Approach to Joint Operations

Joint Warfighting Center
Joint Concept Development and Experimentation Directorate
Standing Joint Force Headquarters
24 February 2006

Note: "Effects-Based Operations (EBO)" began as a U.S. Air Force concept that was very consistent with the Marine Corps' maneuver warfare philosophy. Officials at the Joint Warfighting Center subsequently evolved some aspects of that Service concept for application across the joint force, re-titling it the "Effects-Based Approach (EBA)." The Marine Corps leadership expressed concern that EBA ignores the true nature of warfare and promotes an unrealistic quest for certainty about the enemy and the environment that will paralyze, vice promote, decisionmaking. While officials at the Joint Warfighting Center tried to modify the Commander's Handbook for an Effects-Based Approach to Joint Operations *to allay concerns expressed by the individual Services, the Marine Corps leadership considers EBA to be the antithesis of, and irreconcilable with, our maneuver warfare philosophy.*

This Executive Summary is included in this anthology merely as a means of presenting competing ideas, and should in no way be considered an endorsement of EBA.

EXECUTIVE SUMMARY
COMMANDER'S OVERVIEW

- **Complementing—rather than supplanting—extant joint processes for "centralized planning/direction and decentralized execution."**

- **Reinforcing that "mission" remains the most powerful way of expressing what needs to be done and why (purpose).**

- **Visualizing the operational environment beyond the traditional military battlespace as an interconnected system-**

of-systems comprised of friends, adversaries, and the unaligned.

- **Harmonizing and synchronizing military actions with the actions of other instruments of power.**

- **Appreciating strategic and operational effects—outcomes separated in space and time from their causative actions—whether they are desired or undesired.**

- **Assessing system behaviors and capabilities: an emphasis on effects attainment rather than just task accomplishment.**

- **Collaborating more extensively with superiors, subordinates, the interagency community, and multinational partners.**

- **Establishing a definitive baseline for applying an effects-based approach.**

The majority of this handbook provides the techniques and procedures of **an effects-based approach to planning, executing, and assessing joint operations against a joint doctrine baseline**. **Chapter I** introduces the effects-based approach in a joint context. **Chapter II** discusses how to enhance situational awareness through a systems perspective of the operational environment (OE). **Chapter III** covers the details of the effects-based approach to planning. **Chapter IV** discusses how the development of effects during planning can enhance the joint force commander's (JFC) flexibility and adaptation during execution, particularly with regard to assessing progress toward achieving operational and strategic objectives. And **Chapter V** summarizes the way ahead—initiatives and requirements related to the continued development of an effects-based approach. Finally, **Appendices A, B, C, and the Glossary** provide, respectively, organizational implications, a sample order that incorporates effects, references to source documents, and a compendium of abbreviations and definitions.

Joint Context

An effects-based approach to joint operations calls for thinking differently about how best to employ national instruments of power. The JFCs seek a broader and deeper understanding of the OE: a systems

perspective of the operational area (OA). This understanding and thinking includes how to use the military instrument beyond just force-on-force campaigns, battles and engagements. **The effects-based approach, however, remains within the framework of operational art and design using the joint operation planning process (JOPP) as applied in the *Joint Operation Planning and Execution System (JOPES)***.

Systems Perspective

With a systems perspective, JFCs gain the situational awareness to determine what effects (behaviors) need to be attained within the OA to achieve their objectives. This knowledge of the OE at the theater strategic and operational levels allows the JFCs to mitigate risk and act with greater precision. JFCs can then seize the initiative with greater confidence that their operations will succeed. This type and degree of situational awareness improves planning and execution. **JFCs and their joint staffs are better able to separate "the important" from "the unimportant"** because they understand the battlespace they are about to enter. They are more apt to attain their desired effects while avoiding undesired strategic and operational consequences. **Acquiring a systems perspective of the OA may take more resources (and time) upfront, but yields greater joint command and staff effectiveness and efficiency throughout the remainder of the operation when coupled with continuous assessment.**

Planning

An effects-based approach to planning offers more options to the JFCs. It potentially brings more capabilities to bear on the OE. In an effects-based approach, desired and undesired **effects steer both the mission analysis and course of action (COA) determination processes**. When the JOPP is done with effects in mind, then adaptation during execution is made far easier and more rapid. But more importantly, this **effects-based approach enhances the probability that objectives can be translated more accurately into actionable direction by the JFCs**. The key to an effects-based approach in COA development, analysis, comparison, and selection is for the JFCs to have **a shared common understanding of the effects for the entire campaign before tasks are prescribed and assigned** among those agencies and organizations who will be operating within the OA. And the

better the collaborative climate, the more likely the various interagency capabilities can be integrated and brought to bear in a contingency or crisis. In sum, **the effects-based approach to planning is designed to give greater precision and rigor to the formulation and coordination of unified action before, during, and after an operation.**

Execution

An effect-based approach to execution involves monitoring the OA, assessing the ongoing changes in it, updating and refining plans, and directing friendly actions that alter the OE to conform to the JFCs' intent. Execution is not just about determining better ways to apply kinetic energy to create tactical physical results. While the direct, immediate physical outcomes from specific weapons or actions employed by tactical units are the most observable events in an OA, they rarely—by themselves—produce the conditions or operational effects needed to achieve theater or national objectives. JFCs **must weigh targeting decisions to meet the immediate needs of the tactical fight against the longer term requirements to create or support the strategic and operational effects** within the battlespace to achieve the desired end state.

Effects assessment is crucial to execution. JFCs can only gain sufficient situational awareness and adapt their **current operations, future operations, and future plans** if the staff is assessing "the right things" in the battlespace. While still an important part of an overall assessment process, the measurement of task accomplishment is not as significant as focusing assessment on the attainment of effects—the ongoing effects occurring on key systems in the OA during execution.

The Way Ahead

As joint concept development and experimentation progress, users of an effects-based approach should expect refinements to the enabling doctrines, organizations, processes, and technologies. Regardless of the scope or rapidity of these refinements, **the effects-based approach can already be judged as an important stimulus to future improvements to joint operations**.

Planning for and Applying Military Force: An Examination of Terms

By LtGen Paul K. Van Riper, USMC (ret)[12]

Background

The Joint Chiefs of Staff produced a complete body of joint doctrine for the first time in 1995. This joint doctrine drew heavily from service doctrines, especially materials published by the Army and Marine Corps after 1982. In turn, the service doctrines of this period incorporated many of the ideas developed during the American military renaissance of the late 1970s and early 1980s, ideas based largely upon the theories of Prussian General Carl von Clausewitz, Chinese philosopher Sun Tzu, and other more recent military scholars.

Unfortunately, the bureaucratic procedures the military employed to develop and publish new service and joint doctrines diminished the classical theorists' and contemporary scholars' eloquent definitions. At the same time, these procedures added unnecessary terms. Nonetheless, joint and service doctrines, built for the most part upon established theory, provide a rich store of knowledge for the practitioner of operational art. As a rule, officers regularly have turned to this body of knowledge to plan and conduct operations over the past 15 years. The success of Operations DESERT STORM, ENDURING FREEDOM, and the initial attack of Operation IRAQI FREEDOM demonstrates the strength and utility of existing doctrines.

This Letort Paper briefly examines current joint doctrine to identify the concepts and associated terms that are to guide the planning of joint operations. The paper also discusses the heritage of these concepts and terms, mainly those gleaned from the writings of Clausewitz and Sun Tzu and their later disciples.

In short, this paper describes the essence of current joint planning

[12] This article was a Latort Paper originally published in March 2006. It is reprinted here by permission of the U.S. Army's Strategic Studies Institute.

concepts and links key terms to their intellectual antecedents. The purpose is to provide a framework against which to compare suggested new planning models. If advocates of novel planning concepts are able to show how such concepts can improve upon the ones described in this paper and, in turn, enhance military planning, they will have gone a long way towards proving the merits of their innovations. Contrarily, if they are unable to demonstrate a modicum of improvement, they must necessarily revisit their ideas or abandon them.

Military Planning

Military leaders routinely face situations or problems where they have to decide what actions to take. In addition, military leaders must supervise execution of their decisions. When such leaders make decisions in anticipation of future action, they are in effect planning. One manual states that, "Planning involves projecting our thoughts forward in time and space to influence events before they occur rather than merely responding to events as they occur."[13] In a literal sense, leaders inescapably make all decisions in advance of taking action. Therefore, planning as discussed here refers to situations where there is sufficient time to employ a decisionmaking process.

At its most basic level, planning requires that a leader have an idea of the outcome or results desired from a plan. In addition, execution of a plan requires resources. Said differently, planning consists of determining and then balancing ends and means. Not surprisingly, classical theorists acknowledged the importance of first identifying ends and then matching the means needed to achieve those ends.

Over time theorists, scholars, and practitioners enlarged upon the simple ends, means model, and selected terms to support more detailed and explicit planning. They recognized that how, that is, the methods or ways, means are employed is important, thus, the current ends, ways, and means paradigm. In trying to understand where to focus the available means, theoreticians created concepts such as center of gravity and decisive points. Likewise, knowing why a military expected to use force led to notions of intent or commander's intent, terms used to identify the

[13] Marine Corps Doctrinal Publication 5, *Planning*, Washington, DC: Headquarters U.S. Marine Corps, July 21, 1997, p. 4.

purpose of an action. The desire for tools to permit assigning certain responsibilities to specific units saw creation of terms like mission and objectives. Finally came a term to describe the desired post-conflict or after-battle situation, or end-state.

The following paragraphs discuss the origins and meanings of this current doctrinal vocabulary.

Ends, Ways, and Means

Clausewitz recognized the importance of clearly establishing the reason for going to war when he wrote, "No one starts a war—or rather, no one in his senses ought to do so—without first being clear in his mind what he intends to achieve by that war and how he intends to conduct it."[14] He wrote extensively about the need to relate ends and means in his classic, On War. One authority on Clausewitz's work notes that appreciation of ends and means "is, essentially, what the whole book is about. . . ."[15] At the highest levels of government, Clausewitz argued, the ends of war are always for a political purpose. He acknowledged, however, that that there will be a series of lesser aims that leaders attempt to achieve in order to reach the ultimate end. He listed the first of these as the need "to compel our enemy to do our will."[16] He further observed that, "To secure that object, we must render the enemy powerless; and that in theory, is the true aim of warfare."[17] Thus, at the campaign level, the object (or end) is to "overcome the enemy and disarm him."[18] At the tactical level, disarming the enemy requires destruction of his fighting forces (the ends).

Clausewitz created a similar hierarchical structure for means, the highest being combat. He acknowledged that combat could take a number of forms, not all of which require physical destruction of the enemy, an instance being actions that cause an enemy to abandon a position without

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[14] Carl Von Clausewitz, *On War*, Michael Howard and Peter Paret, eds. and trans., Princeton, NJ: Princeton University Press, 1976, p. 579.
[15] Christopher Bassford, *Clausewitz in English: The Reception of Clausewitz in Britain and America 1815-1945*, in an e-mail note to Paul K. Van Riper, October 8, 2002.
[16] *On War*, Book One, Chapter One, p. 75.
[17] *Ibid*., p. 75.
[18] *Ibid*, p. 90.

fighting. Although, as he noted, "the gradation of objects at the various levels of command will further separate the first means from the ultimate purpose," connoting there must be a correlation of ends and means at each level if there is to be a realistic weighing of the costs and benefits of any war.[19]

The other great classical theorist, Sun Tzu, was not as clear as Clausewitz was in his writing about ends and means. A review of various translations of his work does not reveal these words used in the same unambiguous manner as Clausewitz. Nonetheless, a noted scholar, Michael Handel, argues that Sun Tzu employed what today we know as the rational decisionmaking model to calculate ends and means.[20] He quotes two paragraphs from Sun Tzu's The Art of War to support his case:

> *Weigh the situation, then move.*
>
> Sun Tzu, *The Art of War*, p. 106

> *Now the elements of the art of war are first, measurement of space; second, estimation of quantities; third, calculations; fourth, comparisons; and fifth, chances of victory.*
>
> Sun Tzu, *The Art of War*, p. 88

> *Quantities derive from measurement, figures from quantities, comparisons from figures, and victory from comparisons.*
>
> Sun Tzu, *The Art of War*, p. 88

Handel claims that these statements reflect a process where "such factors as objectives, considerations of relative strength, and the comparison of opponents lead to the weighing of different courses of action and to estimating the probability of victory."[21]

The ends-means paradigm of the classical theorists appears in the writings of numerous modern military scholars. For example, Liddell Hart, despite his disdain for many of Clausewitz's ideas, defined strategy

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[19] *Ibid*., p. 95.
[20] Michael I. Handel, *Masters of War: Classical Strategic Thought*, 3rd edition, London: Frank Cass, 2001, pp. 77-78.
[21] *Ibid*., p. 18.

as, "the art of distributing and applying military means to fulfill the ends of policy."[22] J. C. Wylie, proposed that strategy was a "plan of action designed in order to achieve some end; a purpose together with a system of measure for its accomplishment."[23] Colin Gray characterized strategy as "the use that is made of force and the threat of force for the ends of policy."[24]

Several contemporary scholars of strategy broadened the basic Clausewitzian ends-means concept, specifically by adding ways to the equation. As a case in point, Army Colonel Arthur F. Lykke, Jr. credited General Maxwell D. Taylor with introducing the idea of "ways" in a visit to the U.S. Army War College in 1981 and then expanded on the thought in his own writing.[25] In another example, Air Force Colonel Dennis Drew and Dr. Donald Snow state that, "In the modern era, it is much more accurate and descriptive to consider strategy as a complex decisionmaking process that connects the ends sought (objectives) with the ways and means of achieving those ends."[26] Military writers such as Lykke, Drew, and Snow frequently identified ways as operational concepts, courses of action, or methods used to attain the desired ends. Another current military writer, John Collins, described ends, ways, and means based on the names Rudyard Kipling provided his "six honest serving men." Collins set them forth this way:

- *"What" and "Why" correspond to perceived requirements (**ends**),*
- *"How, When and Where" indicate optional courses of action (**ways**),*

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[22]B. H. Liddell Hart, *Strategy*, 2nd edition, New York: Praeger, 1967, p. 335.
[23] J. C Wylie, *Military Strategy: A General Theory of Power Control*, John B. Hattendorf, ed., reproduction of 1967 edition, Annapolis, MD, 1989, p. 14; cited in Colin Gray, *Modern Strategy*, Oxford, Oxford University Press, 1999, p. 18.
[24] Colin Gray, p. 17.
[25] See, in particular, Colonel Arthur F. Lykke, Jr., "Towards an Understanding of Military Strategy" Military Strategy: Theory and Application—A Reference Text for the Department of Military Strategy, Planning and Operations 1983-1984, Carlisle Barracks, PA: U.S. Army War College, pp. 1-2 to 1-6.
[26] Dennis M. Drew and Donald M. Snow, *Making Strategy: An Introduction to National Security Processes and Problems*, Maxwell Air Force Base, AL: Air University Press, August 1988, p. 13.

- *"Who" concerns available forces and resources (**means**).*[27]

Of the keystone joint publications, Joint Publication 3-0, *Doctrine for Joint Operations*, discusses the *ends-ways-means* construct most explicitly. In describing the requirement imposed on combatant commanders to develop plans for military operations, Joint Publication 3-0 notes that, "The result, expressed in terms of **military objectives, military concepts, and resources (ends, ways, and means), provides guidance for a broad range of activities.**"[28] [Bold type contained in the original.] On the other hand, this publication does not provide clear and specific definitions for each these three separate terms. As an illustration, Joint Publication 3-0 identifies ends variously as strategic and operational objectives, goals, and effects. Though the manual appears to use objectives and goals as synonyms, the use of effects is not always clear. For instance, chapter III, paragraph 5.j. contains the statement, "The essence of operational art lies in being able to *mass effects* against the adversary's sources of power in order to destroy or neutralize them." [Italics added.] The phrase "mass effects" in this context suggests means, that is, forces or weapons, not ends. Otherwise, if we employee synonyms and assume mass is used as a verb, we are saying *collect results* or *assemble consequences*, outcomes difficult to imagine. Paragraph 6.d. of the same chapter makes the following statements: "While some fires will support operational and tactical movement and maneuver . . ., other fires are independent of maneuver and orient on achieving specific operational and strategic effects that support the JFC's objectives. **Fires are the effects of lethal or nonlethal weapons.**" [Bold type contained in the original.] In the first of these sentences, "effects" seems to be synonymous with results or outcomes and represents *ends*. The second sentence is difficult to interpret. If fires and effects are synonymous (which seems to be the case since "are" is the present plural of "be") the sentence is nonsensical. The sentence could just as easily read, "Results are the results of weapons."

Despite the apparent inconsistencies in each term's definitions, all U.S. professional military schools teach the *ends*, *ways*, *means* paradigm and

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[27] John M. Collins, Military Strategy: Principles, Practices, and Historical Perspectives, Washington, DC: Brassey's, 2002, p. 3.
[28] Joint Publications 3-0, *Doctrine for Joint Operations*, Washington, DC, Chairman of the Joint Chiefs of Staff, September 10, 2001, p. III-2.

the joint planning community uses it commonly, seemingly having no difficulty understanding its basic connotation.

Center of Gravity

Clausewitz maintained that to achieve a war's ultimate end, that is, breaking the enemy's will, a nation must direct all of its efforts at a center of gravity or *schwerpunkt*.[29] Although he borrowed the term from physics—defined as the *focal point* where the mass of a body is concentrated and the forces of gravity can be said to converge— he used it in a more abstract manner, noting that it is, "the hub of all power and movement, on which everything depends. That is the point against which all our energies should be directed."[30] He conceded that in nearly all circumstances, unlike in a physical body, there would be more than a single center of gravity. Nonetheless, he cautioned, "The first principle is that the ultimate substance of enemy strength must be traced back to the fewest possible sources, and ideally to one alone."[31] Clausewitz provided several examples of centers of gravity—an enemy's army, its capital, or a primary ally.

Sun Tzu's thoughts on the object of war are less clear than Clausewitz's, though he also presents a hierarchy of things to attack. At the top of his list is the "enemy's strategy," followed by "his alliances," then "his army," and, finally, "cities—only when there is no alternative."[32] Michael Handel suggests that Sun Tzu's implied concept of a "center of gravity is . . . on a different, much higher plane."[33] Clausewitz provides "concrete guidance for action," while Sun Tzu offers "a metaphor" and "[g]uidance for action in general."[34]

During World War I, the German Army expanded on Clausewitz's notion of a schwerpunkt and applied the concept extensively at the

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[29] *Ibid*., pp. 595-596.
[30] *Ibid*. See also Antulio J. Echevarria II, "Clausewitz's Center of Gravity: It's Not What We Thought," *Naval War College Review*, Vol. LVI, No. 1, Winter 2003, pp. 71-78.
[31] *Ibid*., p. 617.
[32] Samuel B. Griffith, trans., *Sun Tzu: The Art of War*, London: Oxford University Press, 1963, pp. 77-78.
[33] Handel, p. 57.
[34] *Ibid*., p. 61.

operational and tactical levels of war. A current student of German military thought observed "in early 1915, the Austro-Hungarian chief of staff, Franz Conrad von Hotzendorf . . . saw the enemy army as a system that could be disintegrated by force concentrated at a similarly critical factor."[35] Whereas Clausewitz focused on one center of gravity or a few that led back to the one, von Hotzendorf was interested in a larger number within just a portion of the enemy's force.[36] In the latter half of 1915, Captain Willy Rohr enlarged on the concept further when he identified machinegun positions as the tactical center of gravity and developed new techniques for task-organized squads that became the foundation for the German storm battalions.[37] These techniques provided the foundation for the more expansive German tactic of infiltration used later in the war.

German combined arms doctrine—derived from earlier infiltration tactics—employed in World War II emphasized the rapid concentration of armored units on operational centers of gravity. People studying this doctrine "began to confuse *schwerpunkt* with another key element of operational design—*the decisive point*."[38] Swiss born French General Antoine Henri Jomini originated this latter term, stating that, of *strategic points*, those "whose importance is constant and immense . . . are called DECISIVE strategic points."[39] [Capital letters contained in original.] Jomini drops the word *strategic* from the term less than a page after introducing it, leaving the now familiar *decisive point*.

Though Clausewitz used the term—"The best strategy is always *to be very strong*: first in general, and then at the decisive point"—it is Jomini's use of the phrase that is more accurate when applied to

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[35] Bruce Gudmundsson, "Field Stripping the *Schwerpunkt*," *Marine Corps Gazette*, December 1989, p. 30.
[36] *Ibid*.
[37] *Ibid*., pp. 30-31. See also Timothy T. Luper, *The Dynamics of Doctrine: The Changes in German Tactical Doctrine During the First World War*, Fort Leavenworth, KS: Combat Studies Institute, U.S. Army Command and General Staff College, July 1981; and Bruce Gudmundsson, *Stormtroop Tactics: Innovation in the German Army, 1914-1918*, New York: Praeger, 1989.
[38] James J. Schneider and Lawrence L. Izzo, "Clausewitz's Elusive Center of Gravity," *Parameters*, September 1987, p. 50.
[39] Baron de Jomini, *The Art of War*, trans. from French by G. H. Mendell and W. P. Craighill, Westport, CT: Greenwood Press, 1863, p. 77.

blitzkrieg.[40] Clausewitz' decisive point referred to a mass against which to concentrate force; Jomini's represented "a portion of the enemy, such as a flank, or it may be a piece of terrain, the destruction of which will lead to a decision in the operation."[41] In a sense, Clausewitz looked at a decisive point as something to demolish; Jomini saw it as something to leverage. Those possessed with a Clausewitzian orientation usually talk of destroying decisive points, while those with a Jominian persuasion most often describe decisive points as places to dislocate or "unhinge" an enemy.

To confuse matters further, a mistranslation in a 1942 book on blitzkrieg, Attacks by F. O. Miksche, rendered schwerpunkt as "thrust-point."[42] This error prompted many later manuals to refer to the center of gravity as the "point of main effort." Adding even more to the misunderstanding, a British writer suggested that a better term might be "focus of energy."[43] Finally, a member of the "military reform movement" of the 1980s put another twist on the expression when he presented the thought that the schwerpunkt described, "the object of focus for the efforts of all subordinate and supporting units, generally expressed in terms of a particular friendly unit."[44] These interpretations can lead the casual student to conclude that anything subject to attack is potentially a center of gravity, very different from the original meaning of Clausewitz.

Because of the confusion noted above, center of gravity is a frequent topic in the works of many present-day military writers. Numerous small books, pamphlets, and articles published over the last 15 years attest to the considerable interest in the subject. In a guide that resulted from a 2-year study, two U.S. Army officers offer "a method for determining the center of gravity of any entity or actor, friendly or enemy; for analyzing campaign options; and for applying center of gravity determinations to the planning and execution of campaigns."[45] A Marine Corps University

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[40] *Ibid*., pp. 50-51.
[41] *Ibid*., p. 51.
[42] *Ibid*., p. 52.
[43] Martin Samuels, Command or Control? Command, Training and Tactics in the British and German Armies, 1888-1918, London: Frank Cass, 1995, p. 8.
[44] Attributed to William S. Lind in Robert R. Leonhard, *The Art of Maneuver: Maneuver-Warfare Theory and AirLand Battle*, Novato, CA: Presidio, 1991, p. 51.
[45] Phillip K. Giles and Thomas P. Galvin, *Center of Gravity: Determination, Analysis, and Application*, Carlisle Barracks, PA: U.S. Army

professor, concerned about confusion on the concept, made an impassioned plea in a paper to, "as a minimum return to the Clausewitzian meaning of centers of gravity as moral and physical strengths, while simultaneously retaining the concept of 'critical vulnerabilities' as critical weaknesses. . . ."[46]

Center of gravity entered the joint vocabulary during the military reform movement of the 1980s. Though military officers applied the term loosely at first, they now evidence a good understanding of the term and generally use it consistent with the official joint definition, which reads, "Those characteristics, capabilities, or sources of power from which a military force derives its freedom of action, physical strength, or will to fight."[47] Several keystone Joint Publications—1, 3-0, and 5-0—note the importance of centers of gravity, commending commanders to focus on the enemy's strategic and operational centers of gravity when drawing up plans. Though Joint Publication 3-0, Doctrine for Joint Operations, recognizes that the term applies at the strategic level, the manual focuses on its employment at the operational level as an analytical tool useful when designing campaigns. The manual also observes that when an enemy protects its center of gravity well from direct attack, commanders need to "seek an indirect approach."[48] Often the object of such an indirect attack will be a decisive point.

Decisive Point

As noted in the previous section, Jomini's idea of *strategic points* loosely mirrors Clausewitz's *center of gravity*. However, Jomini posits two kinds of such points, those with permanence because of their geographical location and those associated with "the masses of the hostile troops and the enterprises likely to be directed against them. . . ."[49] He further defines these points as *decisive*—"those which are capable of exercising

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War College Center for Strategic Leadership, January 31, 1996, p. iii.

[46] Joe Strange, Centers of Gravity & Critical Vulnerabilities: Building on the Clausewitzian Foundation So That We Can All Speak the Same Language, Quantico, VA: Command and Staff College Foundation, 1996, p. 2.

[47] On line version of Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms, available at www.dtic.mil/doctrine/jel/doddict/index. html.

[48] Joint Publication 3-0, *Doctrine for Joint Operations*., pp. III-22-III-23.

[49] Jomini, *The Art of War*, p. 77.

a marked influence either upon the result of the campaign or upon a single enterprise"—and a smaller subset called *objective points*—that delineate the object of the campaign or operation.[50] Both, however, relate to the maneuver of friendly forces. Jomini, reflecting on his study of Napoleon's operations, emphasizes maneuvering against an enemy's flank to separate operating forces from their base of support. One authority writes, "The great merit of Napoleon as a strategist lay not in simply maneuvering for some limited advantage, but in identifying those points that, if lost, would 'dislocate and ruin' the enemy."[51]

The philosophical style of Sun Tzu's *The Art of War* makes it difficult to identify specific references to a concept similar to decisive point. Yet, one can argue that the idea is contained in statements from his discussion of weaknesses and strengths. For example, "Then, if I am able to use many to strike few at the selected point, those I deal with will be in dire straits."[52] One also can make a comparable case for the sense Sun Tzu conveys when discussing the rapid movement of light troops: "In contending for advantage, it must be for a strategically critical point."[53]

Decisive point came into usage throughout the U.S. military in the 1980s. Despite the fact that its Jominian origins made the term suspect with Clausewitzian disciples, it soon proved useful in planning discussions. The official joint definition states, "A geographic place, specific key event, critical system, or function that allows commanders to gain a marked advantage over an enemy and greatly influence the outcome of an attack."[54] (Readers should not confuse decisive points with decision points, which are events in time when a commander must make a decision or act at a geographical location that requires a commander's decision.) The terms vulnerability and later critical vulnerability entered the military vocabulary in the late 1980s as sort of a synonym for

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[50] *Ibid*., p. 78.
[51] John Shy, "Jomini," *Makers of Modern Strategy: From Machiavelli to the Nuclear Age*, Peter Paret, ed., Princeton, NJ: Princeton University Press, 1986, p. 154.
[52] Sun Tzu, *The Art of War*, Samuel B. Griffith, trans., London: Oxford University Press, 1963, p. 98.
[53] *Ibid*., p. 104.
[54] On line version of Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*, available at *www.dtic.mil/doctrine/jel/doddict/data/ d/01520.html*.

decisive point. The official definitions for vulnerability read:

> *1. The susceptibility of a nation or military force to any action by any means through which its war potential or combat effectiveness may be reduced or its will to fight diminished.*
>
> *2. The characteristics of a system that cause it to suffer a definite degradation (incapability to perform the designated mission) as a result of having been subjected to a certain level of effects in an unnatural (manmade) hostile environment.*[55]

The term vulnerability refers to some aspect of a center of gravity or decisive point that is susceptible to attack. When a writer adds the qualifier critical, he or she means that not only is the object vulnerable, but that it is important to the enemy or the enemy's defense.

As generally understood in current joint doctrine, especially Joint Publication 3-0, center of gravity is of a higher order than a decisive point. In fact, this manual makes the case that decisive points are "the keys to attacking protected [centers of gravity]."[56] In this sense, decisive points enable an indirect attack on a center of gravity.

Intent

Although there is no clear linkage to the writings of either Clausewitz or Sun Tzu with the concept of "intent" or "commander's intent," scholars often infer the connection. For example, Martin Samuels, after tracing the concept of center of gravity from Clausewitz to the German Army of World War II states, "A central feature of the *Schwerpunkt* was the *Absicht* (higher intent)."[57] This meant that commanders first provided the intent and then assigned tasks to subordinate unit commanders. If the situation remained unchanged, senior commanders expected their subordinate commanders to focus on accomplishing the task. However, when the situation changed, as it often did, the subordinate commanders were to take the initiative in order to achieve the intent, either modifying or abandoning the task. Samuels maintains that this system of

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[55] *Ibid*.
[56] Joint Publication 3-0, pp. III-22 and III-23.
[57] Samuels, p. 10.

"[d]irective command first entered official German usage in the Prussian *Exerier-Reglement* of 1806 . . . was extended in 1813 . . . [and] had become firmly rooted by the mid-19th century."[58] He also contends that it "was established as a coherent theory" and "enforced as official doctrine" under Helmuth von Moltke (the elder) during his 30 years as Chief of the General Staff.[59]

Many students of military operations attribute the operational and tactical successes of the German Army in World War II to its use of *Auftragstaktik*, or mission-type orders. Trevor Dupuy, for example, writes that Germans believe this "concept pioneered by Scharnhorst, fostered by his successors, and brought to perfection by Moltke" was the major factor in their exceptional combat performance over the years.[60]

Fundamentally, the concept of intent rests on the notion that the *reason* a commander assigns a task, that is, its *purpose*, is more important than the task. The idea is to provide the *why* of a mission. If circumstances dictate, subordinate commanders may disregard the assigned task so long as they focus on accomplishing the purpose. Many scholars and theorists urged the American military to adopt mission-type orders during the late 1970s and early 1980s. Service leaders heeded this appeal and directed incorporation of the concept into doctrinal manuals as well as the curricula of professional military schools, but with some confusion.

Doctrine writers questioned where in an operations plan or order to place the reference to intent. For reasons unknown, writers at the time apparently failed to recognize that existing formats for orders and plans placed intent as the second of two parts of the mission statement. Since mission statements as early as 1940 contained a task with an associated purpose or intent, we can easily make the argument that the U.S. military in the 1970s simply rediscovered the term and its great utility. Current joint doctrine confirms this definition of a mission, "The task, together with the purpose, that clearly indicates the action to be taken and the reason therefore."[61] Nevertheless, proponents advertised intent—in the

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[58] *Ibid*., p. 11.
[59] *Ibid*.
[60] Trevor N. Dupuy, A Genius for War: The German Army and the General Staff, 1807-1945, London: MacDonald and Janes, 1977, p. 307.
[61] On line version of Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms, available at

sense of purpose or reason—as a central part of the new thoughts introduced into operational doctrine in the 1980s and 1990s.

In practice, users often displace the correct meaning of intent with "intention," that is, a design or determination to act in a certain way. Consequently, users regularly express intent as something a commander plans to do to an enemy rather than why he or she intends to take an action. For example, "Commander's intent is the commander's personnel verbal and graphic summary of the unit mission and concept of operation that establishes a description of the mission objective and method . . . ."[62] Less frequently, but no less erroneously, users describe intent as the result desired. This is illustrated in the words of an advocate of the concept who wrote that a mission-type order "involves telling a subordinate what result he is to obtain, usually defined in terms of effect on enemy, then leaving him to determine how best to get it."[63] Interestingly, intent is not defined in joint doctrine, but intention is—"An aim or design (as distinct from capability) to execute a specified course of action"— confirming the explanation above.[64]

Commander's Intent

At about the same time as the U.S. military began reintroducing the term intent into its lexicon, the U.S. Army revised the format of its operations plans and orders adding a paragraph titled commander's intent. This paragraph was to capture the commander's thinking behind the concept of operations. Doctrine developers at the time believed that too often a commander's reasoning, assessments, and guidance were lost when reduced to a few sentences in the "concept of operations" paragraph.[65] In addition, they felt that subordinate commanders should not have to

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www.dtic.mil/doctrine/jel/doddict/data/ m/03426.html.

[62] David A. Fastabend, "The Application of the Commander's Intent," *Military Review*, August 1987, p. 62.

[63] William S. Lind, "The Theory and Practice of Maneuver Warfare," Richard D. Hooker, Jr., ed., *Maneuver Warfare: An Anthology*, Novato, CA: Presidio Press, 1993.

[64] On line version of Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms, available at www.dtic.mil/doctrine/jel/doddict/data/ i/02699.html.

[65] Conversation between Paul K. Van Riper and Richard Sinnreich, February 4-5, 2003.

divine their senior's intentions. Doctrine writers eventually added the paragraph to the formats of joint orders and plans as subparagraph (1) under paragraph "3. Execution, a. Concept of Operations."[66] The official definition for the term states:

> *A concise expression of the purpose of the operation and the desired end state that serves as the initial impetus for the planning process. It may also include the commander's assessment of the adversary commander's intent and an assessment of where and how much risk is acceptable during the operation.*[67]

The purpose or intent in the commander's intent paragraph obviously should mirror the intent contained in the mission statement.

Today, in some plans and orders, the paragraph often becomes an unfocused discussion of many unrelated items and can run to many pages. Moreover, some commanders and staff erroneously assume this paragraph is the heart of a mission-type order, which, of course, it is not. That distinction rests with the intent or purpose declared in the mission statement in a plan or order's paragraph 2.

Mission

Although military staffs have existed in some form since the 17th century, it was not until the post-Jena Prussian reforms that staffs consisted of well-schooled officers. Only after the reforms inspired by Elihu Root and the mandates of the Congressional General Staff Act of 1903 began to take effect did the U.S. military create professional staffs. The bureaucracies surrounding these staffs soon produced standard and approved methods for accomplishing planning, many of them borrowed from European nations. Mission statements were often at the center of these methods.

A mission statement tells subordinate commanders what the higher

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[66] Joint Publication 5-00.1, *Joint Doctrine for Campaign Planning*, Washington, DC: Chairman of the Joint Chiefs of Staff, January 25, 2002, p. C-5.
[67] On line version of Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms., available at www.dtic.mil/doctrine/jel/doddict/data/ c/01102.html.

commander wants them to do, the task, and why they are to do it, the purpose or intent. Though there are several definitions in joint doctrine, it is the first one that interests us:

> *1. The task, together with the purpose, that clearly indicates the action to be taken and the reason therefore.*
>
> *2. In common usage, especially when applied to lower military units, a duty assigned to an individual or unit; a task.*
>
> *3. The dispatching of one or more aircraft to accomplish one particular task.*[68]

End-State

During the intellectual renaissance of the 1970s and 1980s, officers became interested in defining how things would look after military forces secured an objective or accomplished a mission. The term decided upon was end-state. It does not refer to the actual securing of an objective or to the accomplishment of a mission, but to the general conditions desired to be in place when these events happen. The joint definition for the term is, "The set of required conditions that defines achievement of the commander's objectives."[69]

Objective

Another term that came into usage early among staffs was *objective*, most often referring to a specific geographic location. Tactical and operational level staffs use the term most frequently. At the strategic level, it is more often a goal relating to a changed condition. The official joint definitions are:

> *1. The clearly defined, decisive, and attainable goals towards which every military operation should be directed.*
>
> *2. The specific target of the action taken (for example, a definite terrain feature, the seizure or holding of which is essential to the commander's plan, or, an enemy force or capability without regard to terrain*

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[68] *Ibid*.
[69] *Ibid.*

features). See also target.[70]

Users sometimes employ *target* in place of objective. The joint definition that applies to this use is, "An area, complex, installation, force, equipment, capability, function, or behavior identified for possible action to support the commander's objectives, guidance, and intent."[71]

An Example

The following example at the operational level illustrates potential uses of the various terms described above. Theorists admonish commanders to focus on the enemy, not on terrain and certainly not on process. An analysis by the commander in this case determines that the *center of gravity* for the enemy he faces is a corps size organization. The unit, however, has excellent defenses, and the commander decides that a direct attack on it would be very costly. The enemy, though, would be *vulnerable* if attacked while moving, which it is likely to do if it sees friendly forces withdrawing. The commander decides to feint a withdrawal. He also decides that the enemy would offer a *critical vulnerability* if attacked as it tried to cross the White River, so he designates the three bridges over that river in his area as *decisive points*. He then makes these bridges *objectives* and assigns the *mission* of seizing them to one of his own divisions. The unit's *missions* read, "Seize bridges (*task*) over White River in your zone of action in order to prevent the enemy from continuing to move south (*intent*)." Finally, he defines the *end-state* he desires: The enemy corps halted north of the White River and damaged to such an extent it will be unable to conduct offensive operations for at least 96 hours, and friendly units in defensible positions south of the river, re-supplied, and prepared to exploit the situation within 6 hours. The *end* is a specified level of damage to the enemy corps. The *means* to accomplish this *end* are the divisions of the friendly corps. The *ways* are the seizure of the three bridges to halt the enemy's movement.

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[70] *Ibid.*
[71] *Ibid.*

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Excerpts From
A Systemic Concept for Operational Design

By John F. Schmitt

Due to space limitations, this anthology includes only key extracts from Mr. Schmitt's article. The full text can be accessed at: www.mcwl.usmc.mil/concepts/home.cfm

This paper proposes a concept for performing operational design that is intended to help commanders and staffs to better deal with the complex operational situations they routinely face today. This paper argues that commanders should precede current planning procedures with an iterative, conversational design process based on systems thinking. This process is intended to build a systemic understanding of the situation such that a course of action emerges intuitively. Informed by an explicit design that provides a governing logic for the operation or campaign, subsequent planning can proceed more effectively. The underlying premise of this concept is that if we understand a problem well enough, a solution to the problem becomes self-evident. This paper will distinguish carefully between designing and planning, defining the former essentially as problem *setting* and the latter essentially as problem *solving*.

The Controlling Idea: An Explicit, Systemic Design Process to Ground Planning and Execution

The way to deal with a complex operational situation is to carry out a heuristic[72] operational design to provide a logical foundation for all planning and execution, and continuously to assess and revise the design over time in response to changes in the situation. As the design evolves, so too will plans and actions. In this way the organization can learn and

[72] "heuristic: involving or serving as an aid to learning, discovery, or problem-solving by experimental and especially trial-and-error methods <*heuristic* techniques> <a *heuristic* assumption>; *also* **:** of or relating to exploratory problem-solving techniques that utilize self-educating techniques (as the evaluation of feedback) to improve performance." *Merriam-Webster Online Dictionary*. 2006. www.merriam-webster.com (accessed 12 Jun 06).

operations can evolve toward greater effectiveness. See figure 2. The process of operational adaptation works as follows. A mess—some set of conditions—exists in the world as the result of some unobservable physical causality. The designers can observe the conditions (although not comprehensively), but not the causality, which they can only infer from the conditions. Through design the designers formulate out of the mess the problem to be solved and hypothesize a causality to explain the existence and behavior of the situation. This hypothesized causality stands in for the actual causality they cannot observe and provides the basis for conceiving a logic for action. This design becomes the basis for planning. The design and the plan may iterate as the implications of operationalizing the design impose constraints back upon the design. The plan leads to the implementation of a solution through action. The actions change the physical situation according to the actual causality that is in place. This leads to changes in plans and execution within the framework of the existing design, but also to an assessment and eventual revision of the design. The cycle iterates, with design, plans and actions coevolving with the situation.[73] The effectiveness of our actions in the physical world depends on how well our hypothesized causality reflects the actual causality. Of course, there is no way to determine this directly; we can only infer it heuristically based on how closely the results of our actions approximate what our hypothesized causality has led us to expect.

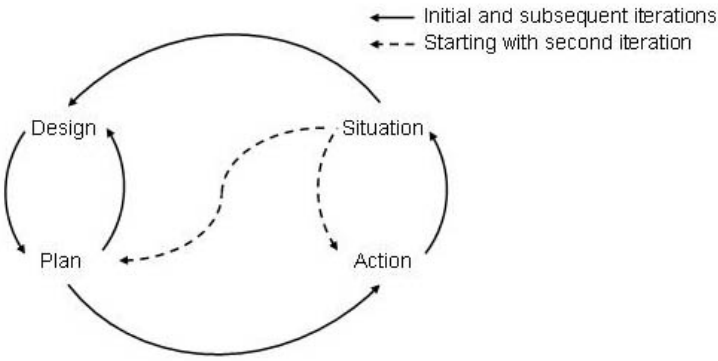

Figure 2.
The process of operational adaptation.

[73] This is, of course, a variation of Boyd's OODA loop as applied to the specific challenge of design and planning. See John R. Boyd, "Patterns of Conflict" in *A Discourse on Winning and Losing* (unpublished briefing slides, 1989), p. 5.

While current planning procedures can encourage planners to jump quickly into perceiving the problem in terms of preferred, existing solutions, this concept calls for taking the time to rationalize[74] the problem on its own terms first. Facing a complex operational situation, the commander assembles a design team and holds an iterative, conversational discourse. The purpose of this discourse is to imagine the situation as a system, to hypothesize a causal logic to explain the behavior of that system and to conceive a logical approach, a *counter*logic, for transforming that system through action. The design team uses extensively *abductive* reasoning—the process of inferring best explanations from limited facts. The resulting operational design is a logic system that permeates all operations by establishing a context for all planning and execution. The rationale is to pull out of the problem itself the logic for solving the problem rather than to apply or adapt some predetermined logic. Once the designers have created the design they continue to test and modify it through argumentation, but more importantly through feedback from the results of implementing the design through action. This feedback becomes the basis for subsequent design iterations which refine or reconstruct the design.

The design team engages in constructing and continuously modifying two complementary logics, or mental models. The first is the causal logic—the hypothesized causality—of the problem. The aim here is to rationalize the problem situation—to construct a logical explanation, in the form of an abstract model, of events observed in the physical world. The second is the *counterlogic*—the guiding logic of the campaign or operation that unravels the problem logic. The essence of this counterlogic is the defeat mechanism (or success mechanism if the problem is not a combat situation), the sequence of interactions that are expected to cause the desired transformation of the object system. The first logic hypothesizes the systemic nature and dynamics of the problem, and the second dictates the broad logical approach to solving that problem. Both logics become constraining upon subordinate commanders who plan and execute in accordance with these guiding logics.

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[74] "rationalize: to bring into accord with reason or cause something to seem reasonable." *Merriam-Webster Online Dictionary*. 2006. www.merriam-webster.com (accessed 12 Jun 06).

Design must be iterative because by nature complex operational situations defy comprehension and resolution in a single iteration. Such problems require designers to make repeated passes from different perspectives to see all the various factors and relationships and then to be able mentally to hold them together as an integrated whole. Each iteration is an opportunity to learn more about the situation and make incremental improvements to the design.

Because a system can be understood only in context, this design process should be expansionist, which is to say that the discourse should expand to include the broader situation within which the immediate problem exists. Designers should generally converse about at least two different systems. First, they converse about the object system—the system they intend to act upon and transform—envisioned as a system in its own right. Then they converse about the broader system of which the object system is merely one element to gain an appreciation for the broader repercussions of acting upon the object system or to identify other potential ways to bring pressure to bear against the object system. They may continue to expand the inquiry outward to broader and broader systems as necessary to achieve the required level of appreciation.