

The Resurrection of Adaptive Planning

by

Lieutenant Colonel Jon C. Wilkinson
United States Air Force



United States Army War College
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Lieutenant Colonel Jon C. Wilkinson
United States Air Force

Colonel Alan Orr
Department of Military Strategy, Planning, and Operations
Project Adviser

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U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013

Abstract

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The revolution in adaptive planning, initiated in 2003, has yet to succeed. The disappointing results of this initiative are due to flawed paradigms that anchor the planning community in a tactical-level process that is misapplied at the operational level of warfare. The flawed paradigms are: 1) There is no difference between the planning process used at the tactical and operational levels, 2) The process for crisis action planning is the same as deliberate planning, just executed on a shorter timeline, 3) The more dynamic the environment, the more important a detailed plan becomes, 4) OPLAN development is compatible with mission command, and 5) Joint Operational Planning and Execution System (JOPES) specialists create the Time Phased Force Deployment Data (TPFDD) after planners write the plan and determine the requirements. This paper proposes a revised planning process, and offers five paradigms that are more supportive of adaptive planning at the operational level of warfare.

The Resurrection of Adaptive Planning

The revolution in adaptive planning, initiated in 2003, is failing. Spanning over a decade, costing over \$10 million, and shepherded by four secretaries of defense, Rumsfeld's attempt to implement the Adaptive Planning and Execution System (APEX) has yet to succeed.¹ Ironically, the planning community's unfulfilled promises to reduce development of Operational Plans (OPLAN) from 24 to 6 months, while making these enormous plans more flexible, is due to that community's inability to properly define the problem, acceptance of flawed paradigms, and a desire to simply accelerate an already inadequate process. Perhaps the adaptive planning initiative was more like a failed coup, and not a revolution after all.

Current OPLAN development is based on five flawed paradigms that anchor the planning community in a process that is misapplied at the operational level. The flawed paradigms are: 1) There is no difference between the planning process used at the tactical and operational levels, 2) The process for crisis action planning is the same as deliberate planning, just executed on a shorter timeline, 3) The more dynamic the environment, the more important a detailed plan becomes, 4) OPLAN development is compatible with mission command, and 5) Joint Operational Planning and Execution System (JOPES) specialists create the Time Phased Force Deployment Data (TPFDD) after planners write the plan and determine the requirements. This paper analyzes these paradigms, proposes a revised planning process, and offers five paradigms that are more supportive of adaptive plans at the operational level of warfare.

Flawed Paradigm #1: No Difference between the Planning Process Used at the Tactical and Operational Levels

The tactical and operational levels of warfare are different. A different planning process is required for each. However, the majority of planners gain the bulk of their experience at the tactical level and are inclined to become anchored in tactical processes, making it difficult for them to adapt to higher levels of warfare as they progress through their careers.² This tendency is evident in the fact that there is a single, joint planning process for all levels of joint warfare.³

Service components, functional components, and combatant commands have some overlap in the level of warfare at which they operate and in the focus of their activities. But, the service component commands and functional component commands generally focus on activities in a single domain, whereas the combatant command, or joint force command in a joint task force, focuses on their combination. A unique responsibility of the Combatant Commander (CCDR) or Joint Force Commander (JFC) at the operational level of warfare is to create a coherent whole by keeping “one hand on the ceiling and one hand on the floor” in a manner that links the abstractions of the conceptual strategic level with the details of the concrete tactical level.⁴ CCDR/JFCs combine multiple single-domain events from the tactical level to create synergistic combined-arms and whole-of-government campaigns at the operational level which ultimately achieve national aims at the strategic level.⁵ The operational level is the nexus of ends (strategic aim), ways (tactical actions), and means (capabilities in each domain) that creates its own complex campaign system based on the interaction of individual tactical activities; the focus of the operational level goes far beyond that of the tactical level.⁶

The fusion of the conceptual strategic level with the concrete tactical level creates a tension at the operational level between the two extremes. This tension thrusts planners on the horns of a dilemma as they seek to establish a “controlled disequilibrium” between concept and detail.⁷ The imbalance of this tension is evident in the inadequacies of current OPLANs that are incredibly detailed in order to ensure tactical feasibility but lack the flexibility to adapt to changes in the operational or strategic environment. This tactical orientation at the operational level creates OPLANs with detailed, tactical feasibility occupying one extreme, far away from the flexibility needed at the other end the spectrum. This is precisely the problem with JOPES, with APEX, and with the Joint Operational Planning Process (JOPP); the methods they describe are based on a tactical-level process that is misapplied at the operational level – yielding inflexible, highly detailed plans. The imbalance at the operational level between the feasibility of detailed, tactical planning and the flexibility of conceptual, strategic planning creates a chasm that tends to leave the joint force stranded on the tactical side of the divide, rigidly entombed in detail.

The planning community needs a true revolution in thought to break free from its tactical bias and to embrace the different focus and planning requirements demanded at the operational level.

Flawed Paradigm #2: Process for Crisis Action Planning is the Same as Deliberate Planning, just Executed on a Shorter Timeline

The degree of uncertainty in a changing environment is directly related to the length of the time from when a plan is created to when it is implemented. As the planning timeline decreases, the length of time required to make a decision, to develop a plan, and to put that plan into action decreases to the point that, in a dynamic

environment, there is insufficient time for significant change. Indeed, in this situation the environment appears stable relative to the length of time until plan execution.⁸ This period of relative stability, when the plan remains aligned with a dynamic environment long enough to complete detailed planning and execution, can be termed detailed planning's *uncertainty horizon* (see Figure 1). When the environment is below this horizon, it is sufficiently stable to complete detailed planning with little risk of the environment significantly changing before the plan can be executed. Longer timelines associated with deliberate plans present more opportunities for change and introduce more uncertainty; shorter timelines associated with crisis action plans present less opportunity for change and introduce less uncertainty.

Arbitrarily assuming that the environment is below the uncertainty horizon and developing the plan in detail ignores the fact that it is only aligned with a snapshot of the environment as it existed when the plan was written. As time passes, the plan loses alignment with the changing environment. It surely will not survive its first contact with reality.

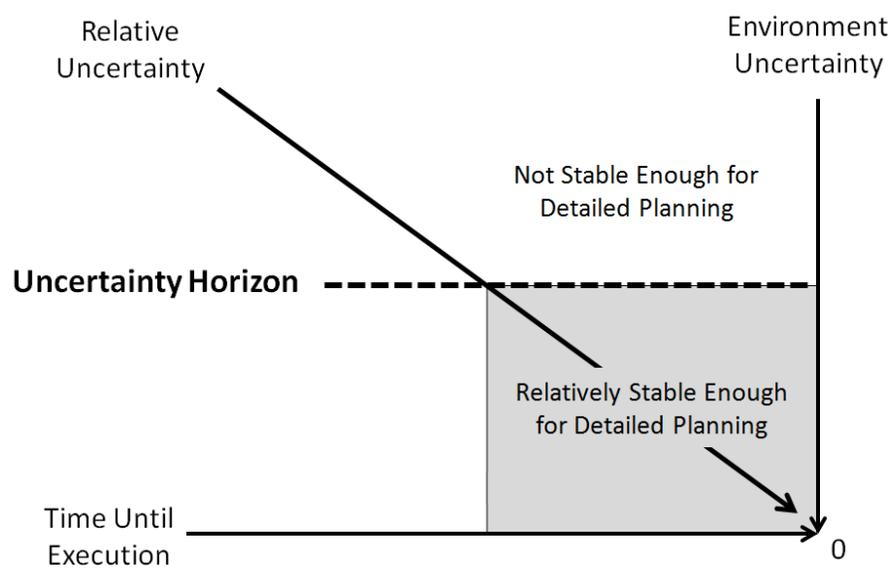


Figure 1. Uncertainty Horizon for Detailed Planning

The planning community needs a new paradigm for incorporating detail into plans based on when they will be implemented, not on some arbitrary snapshot of the dynamic operational environment at the time the plan is written.

Flawed Paradigm #3: The More Dynamic the Environment, the More Important a Detailed Plan Becomes

Detailed plans are best suited to relatively stable situations in which it is possible to predict with some degree of certainty the behavior of systems and control effects that support the strategy.⁹ However, war is waged in the realm of chance against a real enemy in which events do not always unfold as anticipated and in which the environment cannot always be controlled.¹⁰ Leaders often rely on detailed plans to increase predictability, but when those plans prove to be inflexible and fail to align with an infinitely complex, dynamic environment, planners tend to seek even more control by deepening the degree of formalization and widening the extent of comprehensiveness.¹¹ Ironically, detailed planning is inherently a centralizing process whose very purpose is to reduce flexibility not to encourage it.¹² Detailed plans, by their very nature, do not respond effectively to sudden change or surprise since they try to provide a preplanned response to every contingency; they seek to impose control over events in a world that is not predictable, where cause and effect cannot be known in advance.¹³

To create stability in a dynamic environment, the objective is not *prediction* focused on knowing what the adversary is going to do ahead of time in order to control the environment before it changes. Instead, the objective of creating stability is *recovery* focused on flexibility to adapt to the environment as it changes.¹⁴ Francis Bacon theorized that nature is extraordinarily complicated, generally exceeding the human capacity to comprehend it. He believed that humans tend to over-interpret data into

unreliable patterns and then leap to faulty conclusions.¹⁵ Accordingly, attempts to control a complex environment violate Ashby's Law of Requisite Variety, which holds that one system cannot control another system whose complexity or sophistication is superior to its own.¹⁶ Rather than obsess with predicting the unpredictable, planners should accept the reality that the environment will change and develop plans that are designed to accommodate change rather than prevent it.¹⁷

Rigidity and control reduce flexibility and adaptability as detail is added to a plan; in many ways detailed planning is flexibility's graveyard. The 19th-century Prussian Field Marshal Helmut von Moltke believed that diversity and rapid change make it impossible to lay down binding rules for waging war since "prearranged designs collapse."¹⁸ The choice between control or adaptability is best made after considering not *if* detailed plans are necessary, but *when* detailed plans are necessary. When the time until execution is beyond the uncertainty horizon and allows enough time for a dynamic environment to significantly change, then detailed planning is premature, resulting in plans that will become misaligned with a changing environment and ultimately will not survive first contact with reality. A more adaptive approach in a dynamic environment is to execute John Boyd's observe-orient-decide-act (OODA) loop faster than an adversary and thereby remain aligned with a changing environment while empowering subordinates to exploit emerging opportunities.¹⁹

If planning is centered on an overall purpose or vision and on a commitment to a set of principles, then those closest to the action can use that compass and their own expertise and judgment to make decisions and take actions. If you focus on principles, you empower everyone who understands those principles to act without constant monitoring, evaluating, correcting, or controlling.²⁰

The planning community needs a new paradigm that reduces an OPLAN's level of detail and control while increasing its focus on guiding principles and empowerment of warfighters.

Flawed Paradigm #4: OPLAN Development is Compatible with Mission Command

The Chairman of the Joint Chiefs of Staff's (CJCS) 2012 white paper established mission command as the preferred method for command and control of the joint force. It advises a relationship between subordinates and commanders based on common understanding and mutual trust. Mission command assumes the subordinates' freedom to act on disciplined initiative will provide friendly forces with a competitive advantage in an increasingly complex, uncertain, and competitive environment. Rather than control subordinates, mission command empowers them to take action and respond more quickly than an opponent.²¹ Prior to WWII, German strategists came to a similar conclusion and developed a highly successful method of conducting military operations, known as *Auftragstaktik*, which laid the foundation for mission command. They endorsed the Clausewitzian dictum that "uncertainty is an element of war and can best be mastered through the free initiative of commanders and subordinates at all levels."²² Initiative, or "doing the right thing without being told," combined with a shared understanding with superiors of the complex environment, enables a subordinate to adapt to a changing environment and take action more quickly than an opponent without being directed.²³ Centralized control inhibits adaptability and exists when the tenets of mission command are violated (see Figure 2).



Figure 2. Subordinate-Based Command Scenarios

In 2003, Secretary of Defense (SecDef) Donald Rumsfeld launched the Adaptive Planning initiative to produce military plans on a shorter timeline so that they could more easily adapt to changes in the environment. Foremost among the essential elements of this initiative was the imperative for clear strategic guidance and frequent commander-subordinate dialogue in order to promote common understanding.²⁴ The guidance and dialogue envisioned by Secretary Rumsfeld were initially consistent with the tenets of mission command. However, today adaptive planning has degenerated into a formal in-process review (IPR) that tends to control planning rather than empower it.

The IPR has morphed into an unwieldy beast that devours adaptive planning. Although a CCDR answers directly to the Secretary of Defense (SecDef), the civilian bureaucracy in the Office of the Secretary of Defense (OSD) requires each IPR to be approved by the Deputy Assistant Secretaries of Defense (DASD) and then the Under Secretary of Defense for Policy (USDP) before it can be presented to the SecDef. Shockingly, while the IPR is progressing up the OSD ladder for approval by the SecDef, it is running a similar gauntlet in the Joint Staff through J5 on its way to the CJCS who

also wants to exert a measure of control on the developing plan before it goes to the SecDef for approval. The objective of the civilian control is to ensure that military leaders understand and adhere to the priorities and policies of the administration and then incorporate them in their military planning.²⁵ This effort to ensure strategic consistency is often overshadowed by action officers who get mired in the details of the developing plan as they attempt to feed OSD's and Joint Staff's insatiable hunger for information. The planning process ultimately gets mired down in the muck of bureaucratic process that generates different versions of expanded briefings given at the DASD, USDP, Joint Staff, and finally SecDef levels. Often, the SecDef's subordinates and action officers ask for more IPRs than the SecDef requires. Each of these IPRs can take from several weeks to several months to complete; they significantly slow the planning process. The final IPR briefing eventually given to the SecDef is typically a mere strategic-level conversation that is well above the level of the detailed power point slides and background papers required by the OSD staff.

Planners universally accept the obligation to ensure their plans support OSD policy and priorities, but the bureaucratic method OSD uses to achieve that harmony seeks to control planning rather than empower it, ultimately extending the process and decreasing adaptability. The SecDef and CJCS could initiate a more adaptive planning process by seeking first to establish clear intent through a common understanding with CCDRs before starting the planning process, and then granting CCDRs the freedom of action to apply their disciplined initiative to create plans on a shorter timeline.

The planning community needs a new paradigm that does away with the cumbersome IPR gauntlet to align OSD, Joint Staff, and CCDRs after the planning is

underway. A better paradigm would establish clear commander's intent and freedom of action at the beginning of the process.

Flawed Paradigm #5: JOPES Specialists Create the TPFDD after Planners Write the Plan and Determine the Requirements

The current sequence of TPFDD development culminates three disjointed steps that create cognitive gaps in movement planning and increase the risk to successful OPLAN execution. Movement planning begins at the operational level: Big arrows on a map graphically depict the joint force's general scheme of engagement with the enemy (see Figure 3). Next, at the tactical level, supporting plans flesh out the detailed movement of individual units. These detailed tactical-level plans designate the combat forces and critical enablers required for successful operations. The output of the tactical-level planning then serves as the starting point for the strategic movement plan that ultimately converts force flow planning into the TPFDD. Strategic movement planning is conducted through a series of TPFDD conferences after the operational and tactical-level plans are complete. These conferences integrate extremely detailed logistics and sustainment information into combat force requirements in order to determine the total force flow requirements. The conference participants prioritize and deconflict the deployment, bed-down, operating locations, and sustainment of the forces from each service. Because the TPFDD is finalized after the base plan and the service components' supporting plans are already written, there are often cognitive gaps between individual service component's force flow expectations and the reality of what the joint force can provide. USTRANSCOM's computer modeling often reveals overloaded operating bases, critical transportation-hub choke points, and arrival time of combat forces weeks later than anticipated. By the time these cognitive strategic

movement gaps are identified near the end of the two-year OPLAN process, leaders often acknowledge there is increased risk but reluctantly approve a flawed plan rather than restart the arduous sequential planning process to resolve such issues.

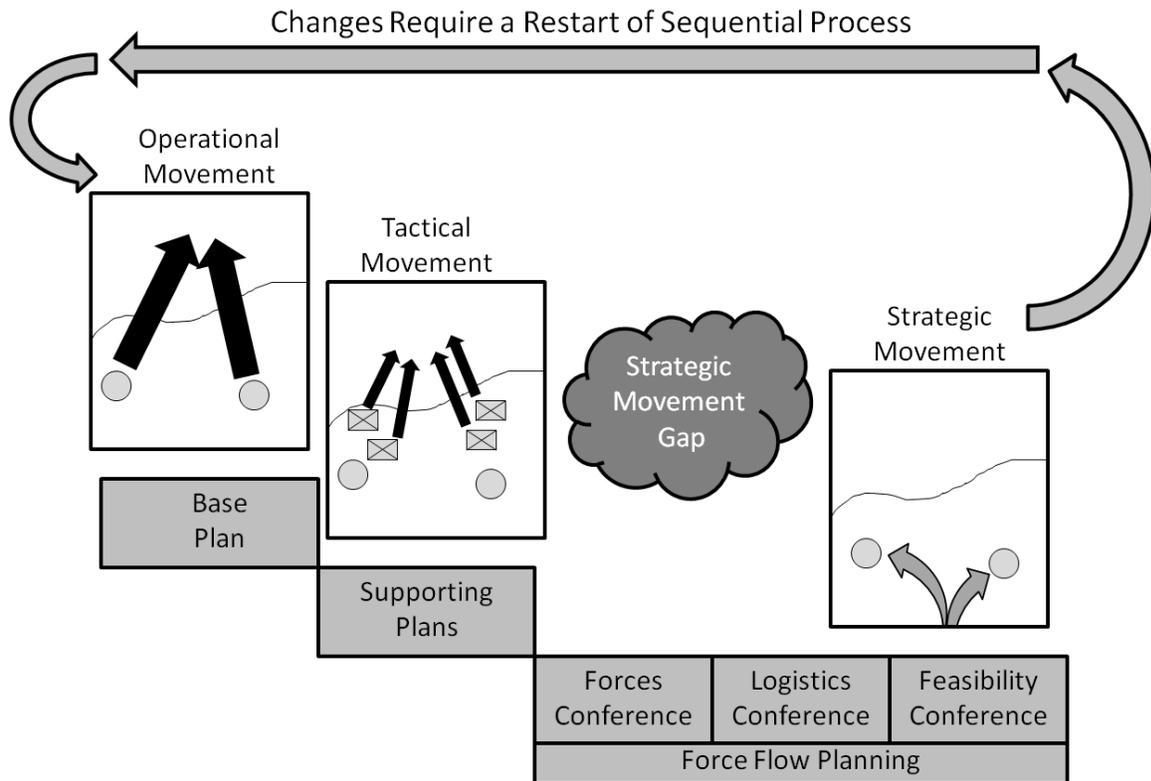


Figure 3. Movement Planning Sequence

An extremely detailed TPFDD inhibits OPLAN flexibility and is caused by planners' lack of expertise with force flow operations. Each military service provides planning schools that formally train officers to think strategically and plan combat operations, but these schools offer little instruction on force flow planning. Hundreds of books on strategy and tactics have been written for every single treatise on logistics.²⁶ Joint publication 5.0 is no exception; it provides 107 pages of detailed instruction about exactly how to conduct operational design and the joint operational planning process

(JOPP). Yet, it provides only a six-page overview of what force flow planning needs to accomplish – and no detailed instruction on how to do it. The JOPES Volume I manual provides slightly more detail, but focuses primarily on the administrative TPFDD aspects of the JOPES database. This lack of instruction on how to conduct force flow planning induces planners to view the force flow development process as a task they are not responsible for. Although trained planners may attend or even preside at TPFDD conferences, the details of the process are left to specialists who are familiar with the JOPES database. This planning methodology creates a cognitive seam between the individuals developing the base and supporting plans and those developing the force flow plans. The average planner's lack of detailed understanding of force flow planning is in stark contrast to their detailed immersion in other areas of JOPP.

In general, the commander's planning team does not have sufficient intuition, or expertise to make force flow decisions. However, they have a general knowledge of combat capabilities based on the insight they gain from years of operational experience. This experience enables them to exercise *automated expertise*, which is the ability to make quick, intuitive generalizations of combat capability that can then be refined at a later time through more detailed analysis.²⁷ This experiential learning facilitates the commander's *coup d'oeil*, as described by Clausewitz. With this capability, planners comprehend a situation at a glance, see complex things simply, and recognize the details or science of individual tactical events. Then they incorporate this quick comprehension into an operational context and develop the initial design for a synergistic campaign.²⁸ However, the planning team's *coup d'oeil* frequently does not include force flow operations. So they do not have the automated expertise to make

intuitive force flow generalizations that could inform planning early in the process and avoid planning gaps in strategic movement before they develop. Instead, the planning team tends to revert to an inadequate tactical-level planning paradigm which assumes combat and sustainment forces are already in place and ready for action, without considering how or when they will arrive. They leave the force flow details to be worked out by someone else during the TPFDD conferences at the end of the development process. This lack of force flow planning at the start of the process results in movement conflicts between service components, in basing and operating location conflicts, and in other strategic movement gaps that ultimately increase OPLAN risk.

Another side effect of planners' lack of general familiarity with force flow planning is that planners seek more and more detail in an effort to understand the final solution at the conclusion of the process. This emphasis on tactical-level detail yields an incredibly detailed TPFDD that binds the OPLAN to a single snap shot of a dynamic environment and greatly inhibits adaptability (see Figure 4).

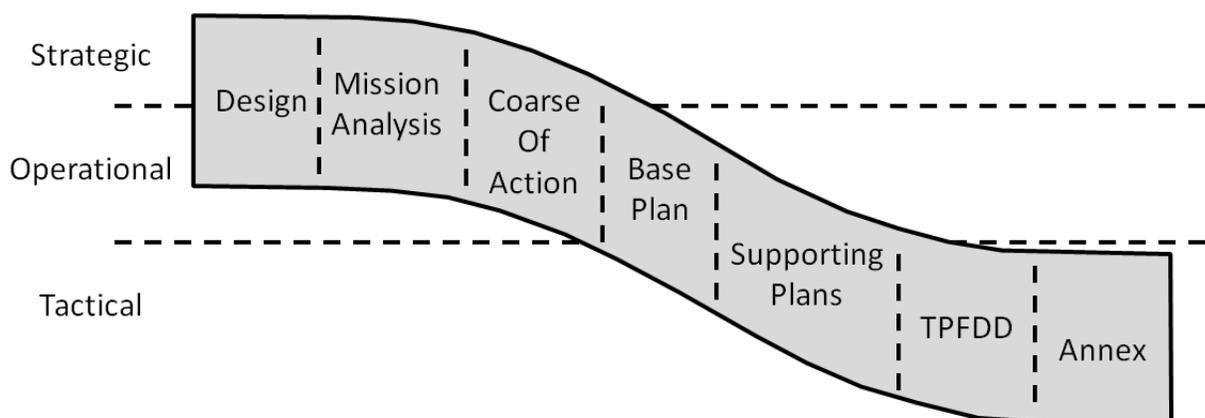


Figure 4. An OPLAN's Dive into Tactical Detail

Planners' lack of force flow understanding sets them up for failure during future, large-scale deployments. In order to free their OPLANs from binding TPFDD detail, some planners suggest jumping to the flexibility side of the feasibility-flexibility chasm by abandoning force flow planning altogether – replacing it with a just-in-time request for forces (RFF) process through the joint capabilities requirements manager (JCRM) system. However, a decade of low-intensity conflict in the Middle East during which rotational deployment schedules were known long in advance cannot be used as the benchmark for future deployments in response to a short-notice crisis. The RFF process in general and the JCRM system in particular simply cannot provide the through-put capacity to deliver forces to meet the response timelines depicted in major OPLANs.²⁹ Some OPLANs are orders of magnitude larger than any deployment in the past decade. If the Commander of the U. S. Pacific Command is correct, the crises these plans are designed to address will have a very short “flash to bang.”³⁰ If there is any validity to the adage “amateurs study tactics, professionals study logistics”, then cadres of experts at the tactical level run the risk of being a gaggle of amateurs at the operational level if they fail to understand force flow operations.

Rather than abandoning TPFDD and detailed force flow planning, the planning community needs a new paradigm that emphasizes increased planner understanding of force flow in order to more effectively incorporate force flow planning at the beginning of

the planning process. Thereby avoiding the excessive TPFDD detail at the end of the planning process, which binds an OPLAN to one version of the future.

Proposed Planning Process

In a clear break from the current planning process, the heart and soul of planning at the operational level must be based on a revised concept of operational design that provides sufficient detail to guide future tactical-level planning actions while remaining adaptable and not bogging down in tactical-level detail. By continuing a design dialogue between the CCDR, subordinates, and superiors even after the OPLAN is approved, the conceptual framework of the plan will keep the OPLAN aligned with the environment, thereby paving the way for additional strategic options. When the framework is eventually fleshed out with detail, it will be based on more current events. The entire plan will remain aligned with the environment – adaptable rather than irrelevant.

The purpose of this on-going design is to frame an understanding of the environmental system, to frame the problem it presents, and to frame a solution in the form of a conceptual, systemic operational approach throughout the execution of the plan. John Boyd described this process as destruction and creation wherein the elements of a bounded system are unbounded (destruction) in order to understand them in isolation and then rebounded (creation) into the constructs of a new system that makes them relevant and provides general understanding.³¹ These destructive and creative aspects of design lead to a conceptual solution to the operational problem. The design dialogue should not merely constitute the first step in a sequential planning process. Rather, it must continue throughout execution, guiding adjustments to the plan so that it adapts as it unfolds and remains aligned with a dynamic environment.³² As the actions directed by the first iteration of the operational design are carried out, they

stimulate the environmental system and trigger its reaction, which changes the system. The plan must continually frame the solution in order to remain aligned with the changed environment system (see Figure 5). This iterative cycle of destruction and creation, as John Boyd described it, acts, assesses, and adapts as long as the campaign is being executed.³³ Planning must embrace the certainty of uncertainty; it must assume that surprise will occur.³⁴ An adaptive OPLAN must plan for change rather than plan to prevent it.³⁵ Rigid detail may then be added in an iterative manner to flesh out the plan as it closes within the uncertainty horizon.

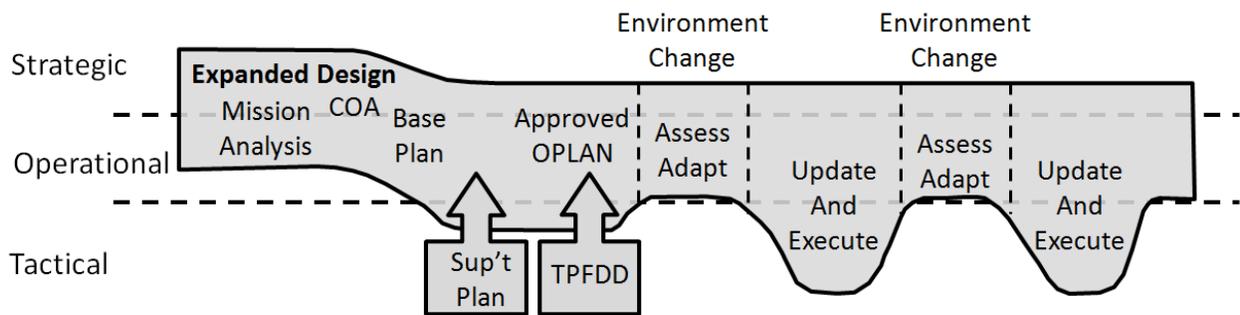


Figure 5. Iterative cycle of execute, assess, and adapt

The on-going design dialogue requires that an OPLAN not be regarded merely as a branch to a Theater Campaign Plan (TCP) that will be executed only if a crisis situation continues to deteriorate into conflict. Rather, Phase 0 of an OPLAN is on-going, so the design dialogue must be on-going as well to keep it aligned with the environment and retained as the source of additional strategic options for resolving the crisis. Therefore, the scope of operational design must be expanded to provide some overlap with the execution of the TCP. Or the TCP must be expanded beyond its traditional focus on security cooperation and theater posture so that both plans overlap the Phase 0 crisis portion.

A flexible planning process cannot exist if the commander's and staff's thinking is not flexible as well.³⁶ The commander's and staff's on-going, strategic thinking and design dialogue must be conceptual and adaptive to avoid adding binding tactical-level detail to the plan until the environment comes within the uncertainty horizon. Determining exactly when the environment has moved within this horizon will be a challenge. Its successful determination may rely mostly on a commander's judgment, rather than on any quantifiable parameter. Nevertheless, until that point is reached, the OPLAN need only provide the framework to guide and synchronize tactical-level action which is planned in detail in service and/or functional component supporting plans but is not written into the OPLAN annexes. The initial drafting of the OPLAN should be influenced and refined by component supporting plans and the TPFDD. In order to keep the plan flexible, tactical-level detail must not be written into the plan until it is closer to execution and the environment is relatively static (see Figure 5).

The iterative cycle of assessment and adaptation required to keep the design dialogue aligned with the environment requires a robust relationship between a combatant command's J5 and J3 directorates. The J5 planning team, which provides the intellectual capital to create the design in the first place, is most familiar with the design and must be responsible for the on-going assessment and iterative operational design process even as the plan is executed. The J5 team must ensure the combatant command is *doing the correct things* during execution to achieve the strategic aim. The J3 team primarily ensures the command is *doing those things correctly*.

The lines between traditional operational design, mission analysis, and initial COA development must blur. The automated expertise required to artfully combine

tactical events into a campaign concept must provide sufficient detail, to describe in macro terms, feasible COAs that simultaneously consider force flow with combat operations during expanded operational design.

One method for considering force flow with combat operations at the start of planning and for avoiding the binding detail of the JOPES database is to use building-blocks that convey multiple lines of database information. Each block of data would represent the total amount of lift required to deliver major combat units to the area of operations (AO), including the support elements they need to be combat effective. Each line in the TPFDD data base includes excruciating detail describing the tonnage and time required to move individual pieces of equipment and personnel. The detail provided in every line of the database is well beyond the level of detail that a planner needs to be familiar with. But planners should have a working knowledge of the amount of airlift and sealift required for blocks of information associated with each major combat unit. For example, a hypothetical fighter squadron comprised of aircraft, personnel, and basic equipment would be represented in multiple lines in the database, requiring 100 short tons of lift to deploy it to the AO. In order to be mission effective at a deployed location, this squadron will also need a maintenance package, munitions, base support, security, fuel, etc. Based on historical analysis of this hypothetical data, these items may require an additional 200 short tons of lift. Planners need to know that, in order to deploy this fighter squadron in a mission-ready status, it will require a total of 300 short tons of lift. These “building blocks” from each of the services, along with the through-put of available lift, enable planners to develop a rough estimate of the deployment

timelines and to synchronize each service's competing deployment requirements based on the commander's movement priorities (see Figure 6).

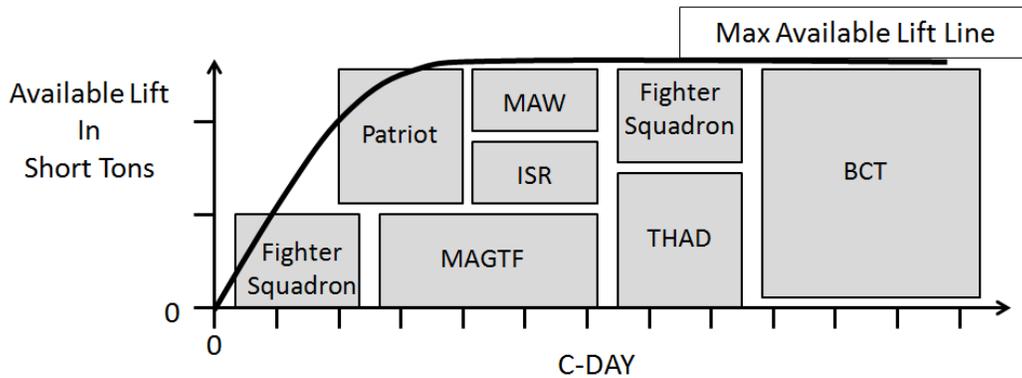


Figure 6. "Building Block" Approach to Macro Force Flow Development

Such rough estimates of the amount of lift available and amount of lift the joint force requires will enable planners at the operational level, early in the planning process, to provide each of the service components an accurate lift allocation of short tons available by phase and facilitate their subsequent development of more detailed supporting plans at the tactical level. This lift allocation also supports TPFDD development that is coordinated and in harmony with the plan at the macro level from the beginning. This TPFDD will be refined later in the process, but will not require months of back-and-forth negotiation between the services during TPFDD conferences to arrive at an acceptable solution. Early inclusion of force flow planning will also avoid strategic movement gaps before they develop and ensure that an inadequate TPFDD does not increase OPLAN risk at the end of the process (see Figure 7).

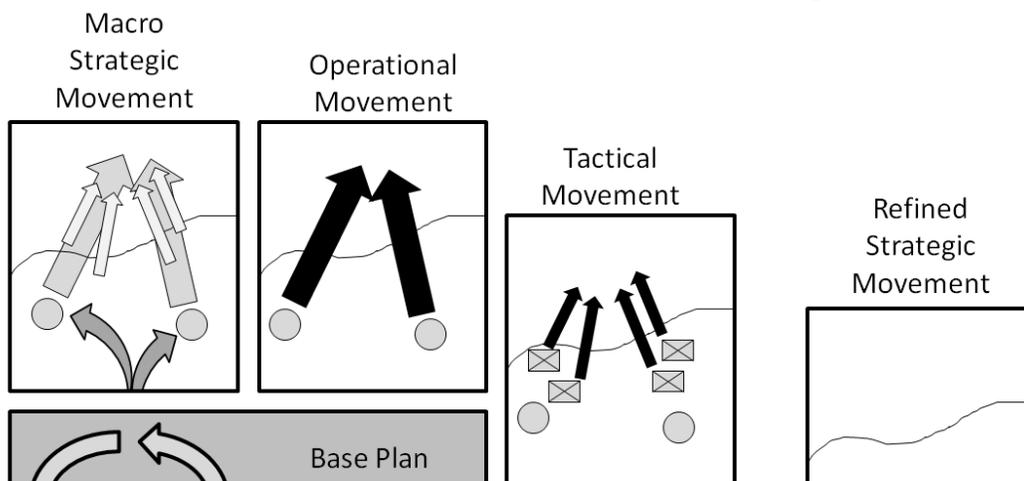


Figure 7. Macro Force Flow Development during COA Development

As the plan is executed, the TPFDD does not simply flow forces into the AO as if it were one huge movement. Rather, it flows in much smaller chunks of data that span a few days at a time, based on the actual force requirements and availability at the time of execution. The planned TPFDD is thus used as a starting point to bound the actual force flow process during execution; in reality the actual force flow is re-created in chunks spanning several days, using the planned TPFDD as a guide. Although the TPFDD is created with excruciating detail during planning, it serves only as a template during execution. The force flow data at the operational level only needs to be refined enough to 1) create a template of the movement of mission-capable building blocks synchronized across the entire force, 2) to be refined enough to communicate the priority of movement by phase, and 3) to be refined enough to communicate each service's lift allocation by phase. In order to accomplish these three tasks, planners must have a working knowledge of the lift required, the lift available, and the CDR's priority by phase for the arrival of forces.

New Paradigms

The legitimacy of the current planning regime is fading and begs the question “what is to be done?” The planning community is ripe for a revolution in thought that changes the way operational planning is perceived.

Revolutions in thought are most often preceded by a change in assumptions that are grouped together to form a paradigm. The American philosopher Thomas Kuhn argues that scientific progress advances slowly until a crisis arises wherein confidence is lost in the existing paradigm’s ability to explain anomalies. If, during the crisis, the existing paradigm is superseded by a rival paradigm that resolves the anomaly, then progress rapidly accelerates in what can be considered a scientific revolution. The new paradigm and the old paradigm are so different that they are incompatible, so scientists must embrace one or the other. Those who move beyond their old way of thinking and are converted to the new paradigm will successfully ride the wave of progress; those who remain anchored in the old paradigm will resist change until they eventually retire or die off, taking their outdated paradigm with them.³⁷ Accordingly, in order for planners to advance beyond the current planning crisis of lengthy development timelines and moribund inflexibility, the planning community must convert to a new way of thinking that completely changes the planning process and constitutes a revolution in operational-level planning.

The 2003 Adaptive Planning initiative failed to deliver because the process it champions is based on flawed paradigms. The planning community must now abandon its old way of thinking and convert to five new paradigms in order to create adaptive OPLANs that fulfill the promise of the adaptive planning initiative.

First, planners cannot dogmatically apply a tactical-level planning process to the operational level; the purpose and nature of each level is different. Operational planning addresses the nexus of ends, ways, and means; it must capitalize on the Ccdr's operational art by facilitating an expanded design dialogue that generates strategic options to avoid conflict and an operational approach for follow on OPLAN development in the event conflict cannot be averted.

Second, operational plans should not be encumbered with the inflexibility of tactical-level details. OPLAN development should focus on achieving the strategic aim by clearly conveying the commander's intent, by establishing common understanding, and by synchronizing tactical action rather than obsessing with the binding detail of tactical-level annexes and TPFDD. The new paradigm must enable planners to find a middle ground that bridges the flexibility-feasibility chasm by supporting the development of OPLANs that are sufficiently detailed and flexible, not extremely detailed or flexible.

Third, detailed planning is adaptability's graveyard. The OPLAN development process must incorporate detail into a plan based on the uncertainty horizon, not based on an arbitrary snapshot of reality that will change before the plan is executed. The design dialogue is very capable of adapting to a dynamic environment and the developing plan should remain at this level until the environment is relatively stable enough for detailed planning to continue.

Fourth, planners must simultaneously conduct force flow planning and combat planning in general terms at the beginning of planning, not in a disjointed fashion at the end of planning after the base plan and supporting plans are already written and it is too

late to make changes. In order to do this, planners, not JOPES database specialists, must develop automated expertise that they can apply during COA development. Armed with the foundation of automated expertise in force flow operations, planners can then incorporate the CCDR's priorities for movement, a general understanding of the lift available, and the lift required for the situation at hand. This enables planners to simultaneously synchronize initial force flow planning with initial combat planning so that cognitive gaps are bridged before they can propagate and increase OPLAN risk.

Fifth, although it may appear counter intuitive, the ultimate stability of an operational campaign system is increased in an unpredictable environment by replacing the rigidity of top-down control with the adaptability of individual freedom of action and initiative bounded by a common understanding of the environment and guiding principles of action. This concept applies directly at the CCDR's level and below. It promotes the design dialogue. It also applies at the level between the CCDR and the SecDef. Rather than impose cumbersome IPRs, leaders above the CCDR should establish a more frequent, yet less formal, dialogue during operational design. This dialogue should focus on establishing a common understanding at the inception of planning, not in the middle of it. It would enable CCDRs with the trust and freedom of action necessary to apply disciplined initiative and develop acceptable options throughout the remainder of the planning process.

OPLANs will continue to be excessively rigid, and their development will continue to be excessively time-consuming until the planning community acknowledges that the fundamental problem is the misapplication of a tactical-level planning process at the operational level. The planning community must discard their leaking bucket of tactical

assumptions and convert to new paradigms that will hold water at the operational level. Only by significantly changing the way the planning community thinks about planning at the operational level will OSD and the Joint Staff have any hope of realizing a true revolution in adaptive planning.

Endnotes

¹ Alton McLendon, Planning Support Branch Chief, U.S. Pacific Command, telephone interview by author, December 12, 2013.

² Stephen J. Gerras, *Thinking Critically about Critical Thinking: A Fundamental Guide for Strategic Leaders*, Faculty Paper (Carlisle Barracks, PA: U.S. Army War College, August, 2008), 14.

³ The Military Decision Making Process (MDPM) used by the US Army, the Marine Corps Planning Process (MCPPE), and the Joint Operational Planning Process (JOPP) used by the Joint force are basically the same process with only minor variations.

⁴ Col William Sorrels, Strategic Plans Division Chief, U.S. Pacific Command, telephone interview by author, December 13, 2013.

⁵ Shimon Naveh, *In Pursuit of Military Excellence, The Evolution of Operational Theory* (Portland, OR: Frank Cass, 1997), 8.

⁶ Edward N. Luttwak, *Strategy, The Logic of War and Peace* (Cambridge, MA: Harvard University Press, 1987), 93.

⁷ Naveh, *In Pursuit of Military Excellence*, 7.

⁸ Albert Einstein, "Relativity: The Special and General Theory," December, 1916, <http://www.marxists.org/reference/archive/einstein/works/1910s/relative/relativity.pdf> (accessed January 21, 2014), 12-13.

⁹ Henry Mintzberg, *The Rise and Fall of Strategic Planning*, (New York: The Free Press, 1994), 239, 249.

¹⁰ Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1984), 101, 161.

¹¹ Mintzberg, *The Rise and Fall of Strategic Planning*, 149.

¹² *Ibid.*, 173, 202.

¹³ Meir Finkel, *On Flexibility, Recovery from Technological and Doctrinal Surprise on the Battlefield* (Stanford, CA: Stanford University Press, 2007), 100.; Lawrence Freedman, *Strategy: A History*, (New York: Oxford University Press, 2013), 622.

¹⁴ Ibid., 223.

¹⁵ Jim Manzi, *Uncontrolled: The Surprising Payoff of Trial-and-Error for Business, Politics, and Society*, (New York: Basic Books, 2012), 6.

¹⁶ Mintzberg, *The Rise and Fall of Strategic Planning*, 349.

¹⁷ Ibid., 103.

¹⁸ Finkel, *On Flexibility*, 107.

¹⁹ Chairman, U.S. Joint Chiefs of Staff, *Mission Command*, White Paper (Washington, DC, CJCS, April 3, 2012), 4.

²⁰ Stephen R. Covey, *Principle Centered Leadership* (New York: Simon and Shuster, 1991), 98.

²¹ Chairman, U.S. Joint Chiefs of Staff, *Mission Command*, 4.

²² Milan N. Vego, *Joint Operational Warfare* (Newport, RI: U.S. Naval War College, 2009), X-36.

²³ Elbert Hubbard, "Message to Garcia," 1899, <http://www.birdsnest.com/garcia.htm> (accessed August 31, 2013).; William DePuy, *Generals Balck and Mellenthin on Tactics* (McLean, VA: The BDM Corporation), 22. ; Ibid., 18.

²⁴ Mark A. Bucknam, "Planning is Everything," *Joint Force Quarterly*, 62 (3d Quarter 2011): 55.

²⁵ Ibid., 56.

²⁶ Finkel, *On Flexibility*, 80.

²⁷ C. Chet Miller and R. Duane Ireland, Intuition in Strategic Decision Making: Friend or Foe in the Fast-Paced 21st Century. *Academy of Management Executive*, 2001, 1, no 1, 25.

²⁸ von Clausewitz, *On War*, 102, 112, 587.

²⁹ Alton McLendon, Planning Support Branch Chief, U.S. Pacific Command, telephone interview by author, December 12, 2013.

³⁰ Andrew Tilghman, "PACOM Chief: Uncontested US Control of Pacific is Ending," January 15, 2014. <http://www.defensenews.com/article/20140115/DEFREG02/301150033/PACOM-Chief-Uncontested-US-Control-Pacific-Ending> (accessed January 19, 2014).

³¹ John Boyd, *Destruction and Creation*, Paper (1976), 6-7.

³² US Army War College, *Campaign Planning Handbook*, (Carlisle, Pennsylvania: Department of Military Strategy, Planning, and Operations, 2013), 73-74.

³³ Boyd, *Destruction and Creation*, 6.

³⁴ Finkel, *On Flexibility*, 27, 99.

³⁵ Liz Tilton, “Strategic Leadership at Patriarch Partners,” speech to Army War College Students, New York, November 22, 2013.

³⁶ Finkel, *On Flexibility*, 99.

³⁷ Alexander Bird, *Stanford Encyclopedia of Philosophy*, (Stanford, CA: Metaphysics Research Lab, 2011), 3.