U.S. Air Force (Joe Laws)

General James Mattis prohibited use of term *effects-based operations* in U.S. Joint Forces Command training and doctrine development

Military Planning Systems and Stability Operations

BY WILLIAM J. GREGOR

On September 21, 2009, the *Washington Post* published an article entitled "McChrystal: More Forces or 'Mission Failure.'"[1] The basis for the piece was a leaked copy of General Stanley McChrystal's "Commander's Initial Assessment," dated August 30, 2009. In asking for additional forces for Afghanistan, General McChrystal stated that his conclusions were supported by a rigorous multidisciplinary assessment by a team of civilian and military personnel and by his personal experience and core beliefs.[2] A week before the *Washington Post* article appeared, Senators Lindsey Graham, Joseph Lieberman, and John McCain made a similar call for more forces in the *Wall Street Journal*. In an editorial labeled "Only Decisive Force Can Prevail in Afghanistan," the senators argued that General McChrystal was an exceptional commander and that he, the new Ambassador,

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and a new deputy commander composed a team that could win the war.[3]

Nevertheless, many hold a different view. Senator John Kerry, for instance, has warned against repeating the mistakes of the Vietnam War. Vice President Joe Biden has advocated an alternative strategy to a force buildup. Former Secretary of State and retired General Colin Powell has expressed skepticism that more troops would guarantee success because, in his opinion, the military mission cannot be clearly defined.[4] President Barack Obama probably asked whom he should rely on or, more precisely, who really understands the situation. If he read General McChrystal's report thoroughly, he would have had even more reason to wonder. In Section V, "Assessments: Measuring Progress," the President would have read: "[the International Security Assistance Force (ISAF)] must develop effective assessment architectures . . . to measure the effects of the strategy, assess progress toward key objectives, and make necessary adjustments."[5] If these measures did not exist, how did General McChrystal know that the current strategy was not working and, more importantly, that his proposed change would work?

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Killing EBO

The militaries of the United States and its allies have been puzzling for more than 10 years over how to plan and assess military operations in the 21st century. Most contemporary discussions of the security environment and military planning begin by noting that warfare is now more complex. The complexity may be described as a network of interconnected, adaptive systems.[6] Alternatively, using General Rupert Smith's term *war among the people*, the complexity may be manifest in the number and variety of participants, their relationships, their cultural differences, and their various and shifting political and social goals.[7] Commanders everywhere have been urged to approach operational problems from a holistic systems perspective and to engage in an iterative cognitive process that is variously named design, the adaptation cycle, and the effects-based approach to operations (EBAO).[8]

At the core of the endeavor to develop an effective contemporary campaign planning system, however, was the (now despised) U.S. Joint Forces Command (USJFCOM) planning system labeled effects-based operations (EBO). In 2008, General James Mattis, USMC, assumed command of USJFCOM and directed, "Effective immediately, USJFCOM will no longer use, sponsor, or export the concepts related to EBO, ONA [operational net assessment], and SoSA [system of systems analysis] in our training, doctrine development, and support of JPME [joint professional military education]."[9] For the present, EBO is dead. Nevertheless, EBO animated the development of the new planning systems either directly, as with EBAO, or indirectly, as with the various forms of design. Only by understanding the various attacks on EBO is it possible to explain why General McChrystal has no measures and the United States has not yet created an adequate planning system.

Before its U.S. demise in 2008, EBO had undergone a rather long period of development and had been subject to a number of different critiques, many of which can only be

understood in the context in which they arose. In the first instance, EBO was an outgrowth of U.S. Air Force efforts to go beyond the Service's narrow focus on an air-delivered weapon's effect on a target and to think in terms of attacking a system. The intent was to use precision weapons to target specific elements of an enemy's military complex and to thereby achieve the same effect as an attack on every weapon or element of that system.[10] Thus, because of the association with precision weapons, EBO became associated with the so-called Revolution in Military Affairs and network-centric warfare and was abused accordingly.

In the next major phase of development, the EBO concept was extended to provide a basis for general operational planning. Lieutenant General Paul Van Riper, USMC (Ret.), calls this phase the most egregious variety and the one that most damaged operational thinking within the military.[11] Nevertheless, it is important to examine EBO's component planning elements before turning to the manifold critiques. The effects-based approach had four primary components: knowledge superiority, an effects-based planning process, dynamic execution, and accurate, timely effects assessment.[12]

A process called operational net assessment provided knowledge superiority. ONA, in turn, was supported by system of systems analysis, which was research directed toward an adversary system. Presumably, SoSA required understanding the adversary's political, military, economic, social, and information systems and the associated infrastructure.[13] Hence, the acronym PMESII was spawned. The goal of this research was to identify key points or persons in these systems (that is, nodes) against which action could be taken to influence behavior in the system to promote achievement of desired U.S. outcomes (that is, effects). The actions were not strictly military and were to involve all the elements of national power: diplomatic, information, military, and economic. In theory, armed with knowledge of the workings of an adversary system, desired effects could be achieved by using the appropriate resource to direct action against a key node: effect-node-action-resource. The ONA process formed the knowledge base for planning.

The introduction of EBO did not significantly modify the Joint Operations Planning Process (JOPP). However, the steps in the process were to benefit from the knowledge provided by ONA. Thus, campaign objectives and strategic goals were to be understood as effects and the knowledge of the adversary nodes related to those effects were to indicate what actions were needed. Added to the JOPP was renewed attention to mission success criteria, measures of effectiveness, and measures of performance. JOPP had consistently required guidance for developing courses of action linked to desired endstates. An effect differs from an endstate only in the fact that the final condition (the endstate) must be the result of direct or indirect actions. Consequently, greater attention must be paid to: how well specified actions are performed; measures of performance, and whether those actions actually produced the condition sought; and measures of effectiveness.

Unfortunately, in common parlance, it is far too easy to refer to a desired condition as an effect without identifying the actions associated with creating the new condition. Thus, introducing the language of effects into a planning system accustomed to endstates and objectives produced confusion, if not outright hostility.[14]

From the perspective of a political scientist, EBO, along with ONA and SoSA, has much to offer, especially if the mission under consideration deals with stability operations,

nationbuilding, and counterinsurgency. However, coming as it did out of the Air Force effort to use precision weapons better and to make air attack more efficient, EBO was immediately associated with the Revolution in Military Affairs and then with Defense Secretary Donald Rumsfeld's concept of military transformation. More importantly, the initial advocates and manifold critics of EBO chose to identify the process with operational research and the hard sciences, not the social sciences. Thus, the opponents of EBO were able to undermine the process by discussing philosophy, not fact.

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Brigadier Justin Kelly and Lieutenant Colonel David Kilcullen opened their argument against EBO by citing Carl von Clausewitz: "War is a free and creative act resting on a clash of wills."[15] They went on to present their account of the development of EBO theory, ending in the observation that EBO reflects the desire to analyze situations sufficiently to enable the successful application of kinetic and nonkinetic means to manage the perceptions and reactions of the target group. Their response to EBO is drawn from Clausewitz—namely, that war is highly complex, verging on chaos, and is a phenomenon not amendable to reductive scientific deduction.[16] In their mind, it is reasonable to approach the conduct of armed conflict as "a system of expedients."[17] Milan Vego in his critique disparages the effects-based approach use of mathematical methods for predicting and measuring effects. He argues that the trend toward using metrics to assess the essentially unquantifiable aspects of warfare reinforces the unrealistic view that warfare is a science rather than an art and a science.[18] General Van Riper considers ONA and SoSA to be pseudoscience. He further argues that SoSA relies on formal systems analysis and that it should be recognized as the same analytical method foisted on the military by Secretary of Defense Robert McNamara with disastrous results.[19] (The merits of these criticisms are analyzed later in the current discussion.) It is sufficient here to note only that the criticisms were either thoughtlessly or deliberately included in the developing planning doctrine.

Joint Publication (JP) 1, *Doctrine for the Armed Forces of the United States*, is the capstone publication for all U.S. joint doctrine. The document provides fundamental principles and overarching guidance for the employment of the Armed Forces of the United States. It is a bridge between policy and doctrine. It begins by stating, "War is socially sanctioned violence to achieve a political purpose. In its essence, war is a violent clash of wills. War is a complex, human undertaking that does not respond to deterministic rules. Clausewitz described it as 'the continuation of politics by other means' [book 1, chapter 1, section 24 heading]."[20] The joint publication emphasizes the same portion of *On War* that has been relied upon in the critique of EBO. In the chapter dealing with analysis in the United Kingdom's Joint Doctrinal Publication 5–00, *Campaign Planning*, there is an inset labeled "McNamara: Paralysis by Analysis." The inset discusses Secretary

McNamara's use of numerical data and systems analysis during the Vietnam War and warns of the need to keep numerical assessments in perspective and to recognize the importance of the commander's subjective analysis.[21] While the United Kingdom's doctrine takes note of one of the criticisms of EBO, it does not take the same strident positions as General Van Riper and Professor Vego. This is perhaps because the United Kingdom considers effects as part of its planning doctrine, which, through Britain's membership in the North Atlantic Treaty Organization (NATO), informs the Alliance's EBAO planning process.

Away from Science

The debate about EBO is a philosophical one about the nature of war. Since the publication in 1981 of *On Strategy: The Vietnam War in Context* by Colonel Harry G. Summers, Jr., USA, the discussion of strategy and war within the military has been dominated by references to Clausewitz. The failures of Vietnam are thought by some to have spurred an intellectual renaissance during which the military built a deep appreciation of history and a thorough understanding of the nature of war.[22] The emphasis on deterministic rules manifest in JP 1 reflects the criticism of EBO that grew out of the Revolution in Military Affairs. The advent of precision weapons and development of networked information systems led to claims that the fog and friction of war would be overcome and permit deployment of smaller but extremely effective forces.[23] This idea compelled proponents of land forces to find within Clausewitz arguments against that vision. Thus, it was necessary in JP 1 to cite Clausewitz on page I–1, as if invoking the Prussian theorist would imbue the guidance with greater wisdom.[24] Secretary Rumsfeld's commitment to transformation and his insistence that Operation *Iraqi Freedom* did not require a massive land force served to make the critics more strident. Arguments over U.S. Army General Eric Shinseki's congressional testimony prior to the invasion of Iraq are, in part, a manifestation of the dispute about systems analysis and precision.

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However, the attack against notions of determinism (that is, the ability to predict with certainty the reaction of an enemy to a specific action or attack) was only one dimension of the criticism. The military had moved from conventional warfare to fighting insurgency and civil wars, and thus, irregular warfare had to be brought into the Clausewitzian framework. Advocates of EBO had contended that SoSA could identify key nodes in the political, military, economic, social, informational, and infrastructure systems. The nodes could in turn be physically attacked or acted against to influence achievement of desired effects. The counter-observation was that human activity is so complex that it operates outside the physical domain and that the human response to an attack is not predictable.[25] The intangibles of war pertain mostly to the human elements and thus are most amendable to the traditional way of military thinking, which is far more comprehensive, realistic, dynamic, and flexible than systems thinking.[26] Clausewitz argued that success relied upon genius and intuition. Genius

U.S. Army (Cherie Cullen)

General McChrystal requested additional forces for Afghanistan based on multidisciplinary assessment and his personal experience and core beliefs

consists of a combination of rational intelligence and subrational intellectual and emotional faculties that make up intuition. Intuition is the agent of decision in the face of difficult circumstances such as inadequate information.[27] Vego finds the solution in the commander's ability to think operationally.[28] General McChrystal's solution might be his core beliefs and his personal experiences. In every case, the answer is greater reliance on the commander to make the right decision.

Because of the insurgency in Iraq and the acrimonious political debate over U.S. policy, the effort to end development of EBO began to focus attention on alternative approaches, one of which was an Israeli idea called Systemic Operational Design (SOD). The U.S. Army initially championed SOD as a counter to EBO. Given that SOD's proponents are hard pressed to show its successes, the Army likely was attracted to SOD by the ability of the Israel Defense Forces (IDF) to engage the Israeli political leadership directly in a dialogue and to dominate national policy.[29] SOD offered the military the potential to control the policy discussion. It also highlighted the importance of the military commander. Colonel Robert C. Johnson, director of the Futures Directorate of the U.S. Army Training and Doctrine Command (TRADOC), launched the study of SOD, and the study was championed by retired Army officers such as Brigadier General Huba Wass de Czege, USA (Ret.).[30] General Wass de Czege was the first director of the Army's School of Advanced Military Studies and participated in writing the 1986 version of Field Manual (FM) 100–5, *Operations*. The SOD experiments have produced a series of other approaches, many of which General Mattis listed in his memo on EBO.[31] All approaches are labeled "design," which makes discussing design a bit confusing. However, understanding design and how it tries

to improve the military commander's influence over policy and planning must wait. The empirical issues associated with understanding EBO need to be addressed because they are central to understanding why SOD and design are not truly alternatives to EBO.

In his response to General Mattis's memo, Colonel Tomislav Z. Ruby observed that the EBO approach was developed because many in the Department of Defense recognized that the classic campaign planning processes were not resulting in successful operations. That was true "because the void between the commander's intent and tactical objectives was not only too great, but one way. The application of strategy to task evaluation produced campaign plans and objectives that were executed without continual review of tactical success versus strategic effects."[32] To accomplish such a review requires some understanding of causality, a concept that has long been excluded from the physical sciences. The laws of physical science are all symmetrical. Consider Newton's law $f = ma$. In ordinary discourse, we would say that force causes acceleration, not that acceleration causes force, or, if the equation were rewritten $f/a = m$, that force causes mass.[33] When critics of EBO assert that the "inherent logic of effects-based planning assumes a mechanistic understanding of causal chains,"[34] they create a straw man to tie EBO to the attack of physical targets and the early Air Force conception of EBO.

The social sciences, however, have long sought to discover causes for civil war, social revolutions, political violence, and insurgencies. None of the theories of the social sciences establish a sufficiently strong relationship that they can be deemed laws similar to the laws of physics. Consequently, assessing cause and effect in political-military endeavors, such as counterinsurgency warfare, will never produce certitude. With that said, the social sciences have developed a complex of methods with which to collect data and discern patterns in human affairs. Not the least is the concept of viewing politics, economics, or societies as a system.

Determining cause and effect in a political or social system requires the definition of a problem. The definition of a political or social system is intended to isolate certain relationships and variables from the manifold details of the world. Thus, if the intent is to discover what military actions to take against pirates off the coast of Somalia, piracy might be understood as a symptom of the Somali political or economic system. Bounding the problem in that manner means that initially no attention will be paid to other aspects of Somalia's difficulties, such as elementary education or illiteracy. The importance of defining the problem before beginning a system analysis was part of ONA and SoSA. For instance, Joint Warfighting Center Doctrine Pamphlet 4 stated,

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"The ONA baseline process begins when the [combatant commander] designates a focus area (a specific nation, region, contingency, or entity) within the [area of responsibility]." Unfortunately, setting the problem was overlooked. Thus, initial examples of SoSA were merely collections of facts. In contrast, SOD and design pay a good deal of attention to defining the problem—but all levels of command are urged to define the problem. The assertion is that understanding the

problem depends on the perspective of the problemsolver rather than objective truth.[35] Consequently, whatever systems analysis occurs in design will be ideographic, structured by the peculiarity of the command or the commander defining the problem. This fact has important implications for assessing cause and effect.

As observed earlier, physical laws are symmetric, with the relationship going either way. Causality goes in one direction. The action or actions must precede the result or the effect. In scientific terms, causal relationships show, first, temporal priority. Next, the link between what is named the cause and what is designated the effect must be connected in space and time; they must be located in reasonable proximity. Lastly, whenever the action is performed, the same effect is observed.[36] This outcome is called constant conjunction. However, in the social world, the last requirement is never met. For example, the political phenomenon called civil war is not always conjoined with such factors as unequal distribution of wealth or general poverty. In particular contexts, poverty could be named the effect and civil war the cause rather than the reverse. Thus, political-military planning for contingencies will always deal with some level of uncertainty depending on how the problem is defined.

More importantly, it is arguable that notions of causality in the social world are learned. Given the absence of universal social laws and the complexity of the social world, inferring from observations that one condition is the cause and another the effect may simply be an artifact of the observer's previous education or an expression of the observer's political culture. If cause and effect are learned through individual experience, it is likely that the observer will have considered too few variables and there may be no confidence in those inferences when they are applied in new conditions. The purpose of ONA and the emphasis on measures of performance and effectiveness in EBO were to develop a larger set of data from which to draw inferences and establish greater confidence in the actions to be taken.

There is one additional aspect of causality that planners and policymakers must consider. David Hume observed, "Formal reasoning cannot reveal causation because we cannot deduce the nature of an effect from the description of the cause or the nature of the cause from a description of an effect."[37] A simple example provided by Wesley Salmon is that of a ceiling light going out. Sitting in the darkened room, it is possible to hypothesize that the bulb burned out. It is equally possible that someone turned the light off at the wall switch, or the circuit breaker was tripped, or an accident at the power station has darkened the area. It is impossible to deduce the actual cause simply by formal reasoning.[38] Some action must be taken to narrow the range of possibilities. The same is true in military planning. The development and maintenance of an ONA and associated measures of effectiveness and performance would have provided a knowledge base from which to develop potential courses of action. However, until actions are taken and results are observed, the effect remains uncertain. That is why in the Australian Adaptation Cycle, actions are taken to stimulate a response to permit assessment of the adversary system before becoming fully committed to a particular course of action.[39] Deterministic causal chains were not part of the EBO concept, but they were a major element of the EBO critique.

Policy and Discourse

All extant versions of design and certainly SOD eschew formal methods and analysis.

There is no simple description of SOD. It claims to find its theoretical underpinnings in systems theory, Soviet operational art, postmodern French philosophy, Chinese military thinking, and a number of other fields.[40] Advocates claim the SOD concept is based on epistemology—on learning. They assert that SOD differs from the classical Western military approach in that it is based on teleology—action focused on a purpose or objective. The argument is that Western military operational planning focuses too much on achieving a defined endstate. General Wass de Czege argues that U.S. military operations in Afghanistan and Iraq should be understood as a perpetual security campaign in pursuit of desirable change: "There is no beginning and no end state. The idea of an 'end state' makes little sense in this context."[41] Instead, there is effective learning and adapting. However, in the postmodern world, learning does not lead to knowing. The postmodern "ontology" is the belief that the world appears through language and is situated in discourse. What is spoken exists but knowledge is not possible because meanings cannot be fixed. There are no facts, only interpretations.[42] In SOD, "making sense of [system] relationships requires hypothetical synthesis in the form of maps and narratives."[43] TRADOC Pamphlet 525–5–500 notes that designing is creative and best accomplished through discourse.[44] While it is questionable that discourse is a reasonable way to develop situational understanding in a military context, it is safe to note that the emphasis on discourse stands contrary to the methods of both physical and social science. It also means that any measures used in sensing the effect of action are likely to be limited to the command and the commander and reflect the general distaste for quantifiable measures.

Despite some enthusiasm for its concepts, the postmodern vocabulary and the military's professional commitment to action made SOD difficult to sell. Its emphasis on learning and discourse did not easily link with the military planning system's need to generate products to guide action. This can be seen in FM 3–24, *Counterinsurgency*. In the chapter entitled "Designing Counterinsurgency Campaigns and Operations," contrary to SOD's emphasis on discourse and interpretation, the text observes, "Design begins with identification of the end state."[45] The text refers to rigorous and structured critical discussions as opportunities for interactive learning but observes that the need for continual assessment requires establishing measures of effectiveness during planning.[46] Unfortunately, the manual is content to leave the definition of the measures to the command.

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The Army has moved further away from the original interest in SOD. TRADOC Pamphlet 525–5–500 has been rescinded, as has the *Art of Design*, Student Text, Version 1.0. Instead of taking the form of a field manual, the concept of design will be addressed in a chapter in the next version of FM 5–0, *Army Planning and Orders*. However, the SOD focus on problem definition has proven difficult to merge with campaign planning. As alluded to earlier, the Israel Defense Forces used SOD to create a substitute for the Estimate of the Situation and to control the policy dialogue. The discussion of design and SOD in the U.S.

Army has also focused on defining the problem. According to the latest expression of design, it occurs in the context of situations, not problems.[47] In the Israeli case, General Moshe Ya'alon observed that the politicians avoided direct, clear, compelling wording. They came to discussion without insights and without basis. It was the military's role to bring the political echelon to understand what was achievable.[48] In the words of General Wass de Czege, "Designing wisdom is to initially think two mission levels up to frame the problem context."[49] In the U.S. military command structure, two mission levels up from a combatant command, such as U.S. Central Command, is the National Security Council. If design is applied, the combatant commander will be defining the problem for the Nation.

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Wicked Problems

Since the passage of the Goldwater-Nichols Department of Defense Reorganization Act of 1986, U.S. combatant commanders have had a role in shaping strategic guidance. This is no surprise. What is different in the case of design is that design intends to address human and social problems. The design literature frequently refers to wicked problems, a term coined in 1973 by Horst Rittel and Melvin Webber in an article on general planning theory. At that time, Rittel and Webber were commenting on the dissatisfaction within the policy science community about the lack of success in social and urban planning efforts. They noted, among other things, the difficulty of problem definition; there is no definitive formulation of the problem because problem understanding and problem solution are concomitant.[50] For example, if a problem within an insurgency is high youth unemployment that provides a pool of recruits for the insurgents, then the solution is also a problem. Is the problem an unproductive economy, a poor school system, or a corrupt system of land tenure? Coupled with this issue is the fact that solutions are judged by advocates as good or bad.[51] Thus, providing aid directly to provinces in Afghanistan might improve efficiency and reduce corruption. However, it would also lessen the importance of the central government whose strengthening is a goal of the United States and the international community. Either course of action is a political value choice, not a technical matter. Interestingly, the *Art of Design* rephrased this aspect of a wicked problem, stating that solutions are *better* or *worse*.[52] Substituting *better* and *worse* for *good* and *bad* may have been an attempt to avoid the appearance of military commanders advocating policy preferences. Unfortunately, the substitution only obscures the inherent normative dimension of wicked problems. FM 3–07, *Stability Operations*, states that planning for stability operations uses friendly actions to shape a better future,[53] leaving the definition of a "better future" to the military planner. Therefore, in many ways, the introduction of design in the Army planning process seems intended to shape the policy preferences of civilian decisionmakers rather than to provide direction for military forces.

The discussion of design in the policy sciences occurred long ago and did not suffer from

postmodern formulations. Design gives form to some concrete response to a problem, a building (architectural design), a product (product design), or a machine or structure (engineering design).[54] Likewise, policy analysis cannot exist apart from a proposed solution. In each example, design is associated with a field of endeavor. The field has a body of knowledge that informs the search for solutions. The question is whether the definition of solutions or courses of action results from a mix between search and creativity. According to Ernst Alexander, most proposed design methods for problemsolving offer only systematic search approaches or rules of thumb to simplify complex problems.[55] There is a role for creativity in the design process, but a critical element is access to, and utilization of, an information-rich environment. Military commanders generally do not possess a wealth of experience dealing with social and economic policy, nor are they accustomed to thinking in those terms. It is therefore extremely unlikely that the introduction of design in U.S. Army planning doctrine will lead to greater military influence in policymaking. Unfortunately, it seems hardly likely to improve military campaign planning.

The conventional military planning system was built on a base of knowledge. Those who criticized EBO as a departure from the classical approach to warfare saw no need to move from the military domain of knowledge to address contemporary uses of military force. Therefore, EBO's critics attacked the efforts to create a scientific base of knowledge about cause and effect related to the use of military force. The critics, like General Van Riper, concluded that EBO, ONA, and SoSA were pseudoscientific approaches that degraded professional military thought and operational planning. In defending the classical approach to warfare, these critics undermined efforts to collect information through a process such as ONA and, more importantly, hindered the development of methods needed to analyze the effects of military action in complex contingencies. Had the U.S. military attended to developing measures of performance and effectiveness for counterinsurgencies and stability operations, it might now be possible to extend the experiences in the villages and provinces in Iraq and Afghanistan to formulate courses of action with a good probability of success.

The supporters of SOD latched on to a process that promised to improve the Army's understanding of "war among the people" without running into the charge that they were trying to apply science to human systems. Unfortunately, the process is better for defining policy than directing military action. Design properly focuses attention on the political-military issues that shape counterinsurgency warfare, but the emphasis on discourse and interpretation is not likely to permit the identification of general lessons or the discovery of cause and effect. Despite the fact that design emphasizes iterative learning, it leaves the development of measures of effectiveness and assessment to the individual command and provides no methods with which to guide the collection of evidence or the interpretation of results. Design does succeed in putting the commander in the center of the discourse process where he can

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use experience and intuition to interpret the complex operating environment.

Robert Axelrod and Michael Cohen assert in *Harnessing Complexity: The Organizational Implications of a Scientific Frontier* that the key aspect in dealing with complexity is the issue of selection. Choosing a course of action requires selection of either a strategy or an agent, someone whose past performance argues that he will develop a successful strategy. However, whether selecting a strategy or an agent, the organization must define measures of success and methods by which to determine whether success is a result of the strategy or the insight of the agent.[56] Attributing success to either a strategy or an agent requires insight into cause and effect. The drive for design and the argument against scientific measures have ensured that the military offers the President only one option, the selection of an agent. In the case of Afghanistan, the agent is General McChrystal. Either his education and experiences inform his intuition or they do not, but there is little else to rely on. Unfortunately, as President Barack Obama demonstrated, U.S. Presidents seldom rely solely on their military commander's judgments. Presidents want insights into the strategy and some evidence that the proposed strategy will work. One purpose of a military planning system is to enable a commander to present his recommended course of action based upon evidence, not simply his warrant.

Joseph Soeters of the Netherlands Defense Academy, along with others, visited ISAF in Kabul in January 2009 to observe how NATO was implementing EBAO. He found that many commanders were not fully convinced of the usefulness of thinking in terms of effects.[57] Nevertheless, he observed, "The military will have to abandon its mindset, because it should be well understood that quantitative data, provided they are reliable, valid, timely, and adequately analyzed, and provided that they have been carefully assessed on these merits, are indispensible."[58] Unfortunately, Soeters learned from Army Colonel Bobby Claflin, director of the Afghan Assessment Group, that, in his words, "our metrics suck."[59]

The truth of Colonel Claflin's statement was validated soon after President Obama announced his strategy for Afghanistan on December 1, 2009. On December 21, in a *Wall Street Journal* editorial entitled "Fighting a Smarter War in Afghanistan," Ann Marlowe observed that the valuable data collected by Army platoons and companies during numerous deployments in Afghanistan were neither properly stored nor analyzed, "so most of our soldiers are operating with bare guesses about where the leverage points are in their local populations."[60] She reported that the Army had begun to develop a database with which to support the generals who make policy and a model with which to evaluate whether the Afghan National Army can achieve its growth objective. She also observed, "It seems odd that this model would follow, rather than precede, this fall's announcements by General Stanley McChrystal about the growth of the Afghan National Security Forces. But data management gaps permeate the Afghan war."[61] In January 2010, Major General Michael T. Flynn, USA, along with Captain Matt Pottinger, USMC, and Paul Batchelor, observed that U.S. intelligence officers and analysts could "do little but shrug in response to high level decision-makers seeking the knowledge, analysis, and information they need to wage a successful campaign."[62] They noted, "In a recent project ordered by the White House, analysts could barely scrape

together enough information to formulate rudimentary assessments of pivotal Afghan districts."[63] The problem, they concluded, was the tendency to overemphasize detailed information about the enemy at the expense of the political, economic, and cultural environment that supports it. Such data are not terribly relevant in a conventional war, but contextual data are essential in a complex contingency.

The relationship between cause and effect, action and response, in stability operations is not inscrutable. However, the methods and data needed for dealing with complex contingencies differ greatly from those of conventional military operations. Greater attention must be paid to the political, social, economic, and cultural context of the operation because those conditions have a serious impact on how military actions work and how those actions are perceived. Because the effect of any action is conditioned by the environment, it is important to develop confidence in the anticipated effect by observing patterns in a large body of data collected over a long period. In both Afghanistan and Iraq, the United States should already have that data. Regrettably, it does not. In their strident opposition to EBO, ONA, and SoSA, the American military in general and the U.S. Army in particular chose to ignore the assessment of strategies and the need to capture a record of action and response in a complex environment. The military has instead decided to pursue a planning process that avoids the serious study of complex contingencies and substitutes a dialogue with the commander, leaving him to use his experience and intuition to define or discover the right strategy. The President's strategy review for Afghanistan and recent proposals to reform intelligence indicate that national security decisionmakers place a greater emphasis on data than dialogue. Currently, there are no consistent measures of effectiveness and only a small body of data with which to judge the likelihood of success. Thus, military experience cannot be generalized, and the views of generals are ideographic. Tomislav Z. Ruby, in his response to General Mattis's memorandum, argued, "Rather than abandoning the concept of EBO, USJFCOM should move to create a change in the U.S. military culture away from accepting inefficiency as long as there is overwhelming power."[64] General Flynn and his coauthors also call for a change in the military culture. It is past time to incorporate knowledge of the dynamics of complex contingencies into the body of military knowledge. PRISM

Notes

[1] Bob Woodward, "McChrystal: More Forces or 'Mission Failure,'" *The Washington Post*, September 21, 2009.

[2] International Security Assistance Force, Afghanistan, "Commander's Initial Assessment," August 30, 2009, 1–3.

[3] Lindsey Graham, Joseph I. Lieberman, and John McCain, "Only Decisive Force Can Prevail in Afghanistan," *The Wall Street Journal*, September 14, 2000, A15.

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