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**Productive Tension in Joint Planning:
A Constructivist Model**

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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06 November 2007

Abstract

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Leveraging diversity of thought in planning group decisions can have high payoff at both operational and strategic levels of war, and pre-war deterrence. According to Joint Publications 3-0 (*Joint Operations*) and 5-0 (*Joint Planning*), joint operations are standard procedure for military operations and campaigns. Add the combined nature of current, non-clandestine military operations outside the United States, and the value of leveraging diversity of thought among components and international partners becomes clear. We can value the range of input from component and coalition partners for unity of effort, and for the increased geopolitical legitimacy that attends coalition cooperation. As a practical matter, a variety of inputs to a single operation could result in confusion, contention, or even a compromise or consensus solution that satisfies no one. Better to engage in understanding and valuing the offerings of partners—national and international—in ways that enhance the efficacy of the entire joint and combined operational undertaking. A union of diverse partners working toward a common outcome in a constructivist planning environment can produce on an operational level the kind of adaptive problem-solving ingenuity that America has long prized at the individual level. Using a constructivist model to understand, value, and deliberately incorporate in joint planning the contributions of partners from various cultures—national (service component liaisons, interagency representatives) and international (e.g. combined partners, IGOs, and NGOs) can enhance the efficacy of joint planning.

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Necessity of Diversity of Thought

Warfighting. When the President decides that diplomacy has failed and summons the American military to plan for contingencies, planners (and the people of the nation funding them) do not merely *want* to win, we *expect* to win. Moreover, we usually did win, until now. Renewing an old kind of small war pits nations and states against non-state actors in violent opposition where perception is often a better weapon than a cruise missile. In approaching these enduring, intractable problems, the Department of Defense is not adequately leveraging the unique cultural qualities of our coalition partners, nor of individuals from various services in solving ill-structured operational problems.

Joint Operations Publication 5-0 is the keystone for joint planning work. This seminal doctrinal publication codifies procedures for U.S. forces conducting deliberate planning through the range of military operations, covering functions and factors that make joint planning possible. Chapter II, “Strategic Direction,” makes a point of integration and synchronization of joint staff activity. Specifically, it is reasonable to expect force-multiplying effects when including language skills with cultural and regional knowledge in planning groups. The Chairman of the Joint Chiefs of Staff charges component commanders and subordinate commanders to routinely integrate such expertise in cooperation and crisis action planning efforts, as well as in daily operations.¹

What the base joint publications have not detailed is precisely *how* to integrate the variety of expertise available on the joint staff. According to the Director of Strategic Studies at the U.S. Army War College, without more detail in the doctrine, commanders have a gap between their intuition and their analysis—and they increasingly go with their analysis when their gut tells them to take another tack.

² This lack of adaptive decision-making may be costly. We have lost an advantage when board-selected commanders who have matured through years of military leader development defer to codified instructions and processes when the situation requires art and innovation.

When a commander is blessed with elusive but desirable *coup d'oeil*, a combination of experience and wisdom inform decisions in ways that achieve strategic and operational success. We cannot guarantee that each commander will have this Napoleonic gift, but we can ameliorate shortcomings in a commander and still achieve a high level of thinking by substituting a *group* of minds to do the work of a single one. This collaborative method applies constructivist theory to planning to increase our advantage over an opponent. Applying a wetware-based technology to deliver an information advantage can make the work of war fighting easier—essentially lengthening the moment arm that sooner dislodges the enemy.

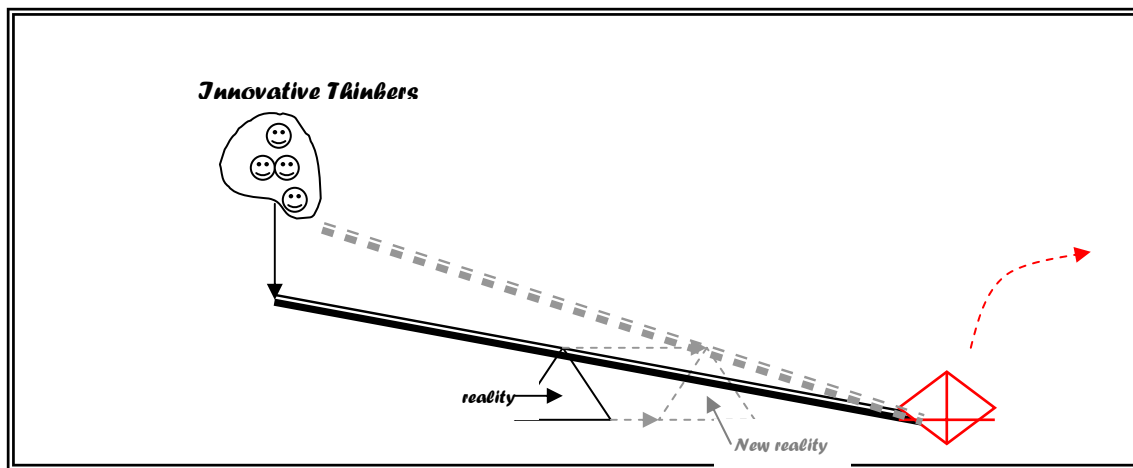


Figure 1. Intellectual Leverage

By outthinking the opponent we move the fulcrum toward the adversary. We can apply less force (which may translate to expending fewer military or political or economic assets) to accomplish the same operational goals. Applying the same amount of force to the friendly end of the lever after moving the pivot point actually *amplifies* the effect on the enemy. This physical representation in Figure 1 is less impressive than the actual potential intellectual advantage a

constructivist planning group could have over an opponent—changing perceptions of the scenario on a grand scale that minimizes or perhaps precludes force-on-force missions.

Social construction of meaning is not new. We agree upon common meanings for symbols all the time—that consensus is how each of us is able to read the words on this page, and how we can recognize dozens of fonts and type styles (B, B, **B**, B, ℬ, *B*, *B*, *B* . . .). Cognitively, this human ability to recognize and agree *and then to use* symbols is a complex notion, but practically, our ability to acquire language as infants and toddlers, and later, to learn complex symbol patterns and to apply them, is routine and unconscious, though no less remarkable because it is ordinary. In part, this distinctly human ability to learn allows us the priceless ability to reshape reality by redefining it with symbols. We are not talking about assuming away difficulties. This process involves fully vetting problems and re-envisioning them in ways that offer up novel solutions.

Rudiments of Constructive Thinking

Constructivism asserts that we learn through a continual process of constructing, interpreting, and modifying our own representations of reality based on our experiences with reality.³ Constructive learning is a group phenomenon. Members of the learning group, study group, or planning group establish a common language for use among themselves. In the case of joint planners, the military lexicon detailed in joint doctrine already establishes common language. The Joint Operations Planning and Execution System provides much of the symbolism and labeling required to describe objectives and outcomes. What constructivism contributes is the freedom to generate significantly more imaginative solutions to both tame and ill-defined problems. Military institutions such as the Army's School of Advanced Military Studies and, as originally conceived, the Naval War College, effectively employ aspects of the constructivist model.

Socially constructed learning, a constructivist approach to problems, requires the social embedding of agreed-upon language to define terms and to describe conditions. Military jargon is

fine, as long as all the members of the discourse community are using terms the same way. Standard lexicons, joint dictionary JP1-02, and other doctrinal references can help members agree. Planning teams can establish their own idiosyncratic terms with special meaning, if they can be precise and consistent in their use. The necessity of common language is critical for common understanding of the problem, and for solution generation. There is no social construction if the limited society, the discourse community of people talking to each other in the planning room, cannot communicate effectively and precisely.

Social construction also requires a shift in power relations. To establish conditions for social construction to work, senior leaders must be willing to share power so that each contributor can be heard and understood. The lead planner must manage dominant personalities. Those who typically hold back must recognize the requirement for each member to contribute materially to the solution without concerns of being shouted down or having their contributions dismissed. Effective management can best occur through careful selection of members and development of planning groups. Seniors ensure in advance of allowing the team to develop the problem that all persons involved know that every planner must join the dialogue. Eliminating one voice could mean the difference between an innovative solution and a failure to deliver.

Establishing the flattened organization with coequal participants yields conditions where productive conflicts prevail. Avoiding conflict is an intuitive human reaction for most of us, but in a planning situation, “an open exchange of conflicting ideas which parties feel equally heard, respected, and unafraid to voice dissenting opinions for the purpose of reaching a mutually comfortable solution”⁴ is precisely the type of environment that produces the innovation we desire. The alternative, unproductive conflict, has plenty of circular arguments that bypass issues without addressing the material ones, raised voices, *ad hominem* attacks, and lack of communication that leads to an effective divorce among the participants in the dialogue.

Developing productive conflict in a discourse group has the elements of a successful discussion in a marriage. Accusation gives way to descriptions of how and why certain aspects of the issue matter to each agent. The Infantry officer in a parallel planning group cringes at the idea proffered by an Air Force planner to drop a brigade of Soldiers behind enemy lines in a course of action that takes them out of fire support range when the availability of close air support assets is questionable due to weather. Instead of prematurely declaring the course of action a waste of the planning groups' time, he can express his reservations, and see what other elements of the plan might become part of the compromise plan. Better still, the Bulgarian naval officer and the Department of Energy representative on the Joint Planning Group (JPG) come up with a method to mitigate risk to the ground forces that creatively satisfies the Infantryman and makes the course of action acceptable.

This latter point is essential: innovation is fine, as long as the solution set has the potential to accomplish the mission—the main purpose for assembling the planning group. Members are not oppositional. Even when they disagree, they move toward a mutually agreeable outcome—even when none of the members knows precisely what that outcome will look like until the collaboration is complete.

To facilitate a mutual understanding as the discussion proceeds, planners use talkback (“What I think I heard you say was that you want to use rotary-wing aircraft to hold terrain for a short period in the proposed course of action . . .”). Team members also use brief-backs (“In this plan, a joint team comprising Marines and Army will execute a double envelopment by sea and air . . .”), and questions (“Why do you believe the enemy will respond to our action with fires instead of maneuver?”). A variety of questions should continually punctuate the dialogue, as queries are especially important to group learning. Questions help us understand our coworkers, and help them understand the way we think. Properly framed interrogatives, those that genuinely seek

understanding rather than posing as veiled attacks, open the forum to habitually reticent members of the JPG who might ask the breakthrough question. Questions stimulate dialogue and open the floor for more questions, the answers to which mature the group's knowledge, which is necessary for creating new knowledge—to move from the known to the unknown.

Finally, recognize that all the effective interchange may result in greater mutual understanding, but need not necessarily result in total agreement.⁵ Importantly, mutual understanding does not necessarily result in a solution or in a course of action, either, which is the ultimate goal. Biases, hunches, and professional (or even personal) experiences that the group member cannot empirically prove nor effectively share may keep certain planners firmly tied to certain positions. Unless they are wholly unreasonable, it is best to move the planning process along the timeline you have established in the backward planning sequence.

Wedding Constructive Conflict to Diversity of Thought

In some circles, diversity is as provocative as affirmative action. To some, diversity equates to race. For the purposes of this argument, diversity is more neutral and more complicated than those perceptions allow. What we are after in an effective JPG is *diversity of thought*, which planners cultivate by seeking thinkers from a variety of sources. Sometimes diversity of thought does derive from cultural differences, which is more involved than looking at someone's skin color. Differences that matter can be inter-service differences, international differences, gender-related, age-related, and even a function of rank or time in service. It is up to the chief planner to build the most effective thinking group based on the personalities and skills in the available pool of possible planner group members.

Diversity of thought in a constructivist-planning model combines constructive meaning-making and productive conflict. By this combination of creative impulse planners can move the fulcrum away from friendly joint forces and toward our opponent. For this discussion, **diversity**

means “differences in people that can have an impact on the effectiveness of a joint organization.” This is similar to the definition offered in the Military Academy’s Leading Diversity Program, which has been shared with many Army organizations since July 2002.⁶ Differences in people that have an impact are not automatically positive, as unproductive tensions and inadvertent misunderstandings on joint staffs show. The goal is to ameliorate (not eliminate) differences and turn them to productive advantage. It is often up to the leaders to balance their authority with an ability to establish a sharing environment of open interchange:

Leader behaviors and attitudes that foster acceptance, understanding of, and valuing differences in an environment where all individuals achieve high productivity; maximize the use of their knowledge, skills, and abilities; and are committed to the organization’s goals result in increased mission effectiveness.⁷

Effecting such conditions can seem as difficult as developing *coup d’oeil*; however, planners can learn these people skills and apply them reliably.

Challenge of Joint Diversity

Joint operations era began in earnest with the Goldwater-Nichols Department of Defense Reorganization Act. The necessity of integrating the separate service components is clear from the preamble describing the purpose of the 1986 legislation:

Since 1986, Goldwater-Nichols has made tremendous changes in the way DOD operates—joint operations are the norm—Arabian Gulf, Zaire, Haiti, and Bosnia. Implementation of the act is an on-going project with Joint Vision 2010 (1996) and Joint Vision 2020 (2000). Both documents emphasize that to be the most effective force *we must be fully joint: intellectually, operationally, organizationally, doctrinally, and technically*. The joint force, because of its flexibility and responsiveness, will remain the key to operational success in the future.⁸

The operative term for the purposes of this argument is *intellectually joint*. We limit ourselves unnecessarily if our joint intellect comprises only a collection of minds adhering to a common doctrine. We can advance the concept of intellectual jointness further by developing a Joint Planning Group (JPG) with a consciously considered mix of experiences and expertise. Although the commander does not necessarily handpick each member of the JPG, that group

integrates and synchronizes the expertise of staff elements in the creation of a *collaborative* and *adaptive*⁹--but executable—contingency or crisis action plan. Joint publications provide extensive details on what the products of the planning process are, and what the process is to develop estimates, plans, and orders. While doctrine does recommend staff participants, missing is any discussion of how to staff the JPG,¹⁰ in particular the inestimably valuable reckoning of the cognitive makeup of the group.

Cooperation is not automatic, even for people in uniform with a common goal. Adapting to a new culture is an obvious challenge that requires time together; when planning, interagency involvement must occur early in the process. When demand for an immediate solution is high, interpersonal friction from stress interferes with necessary group bonding and acculturation.

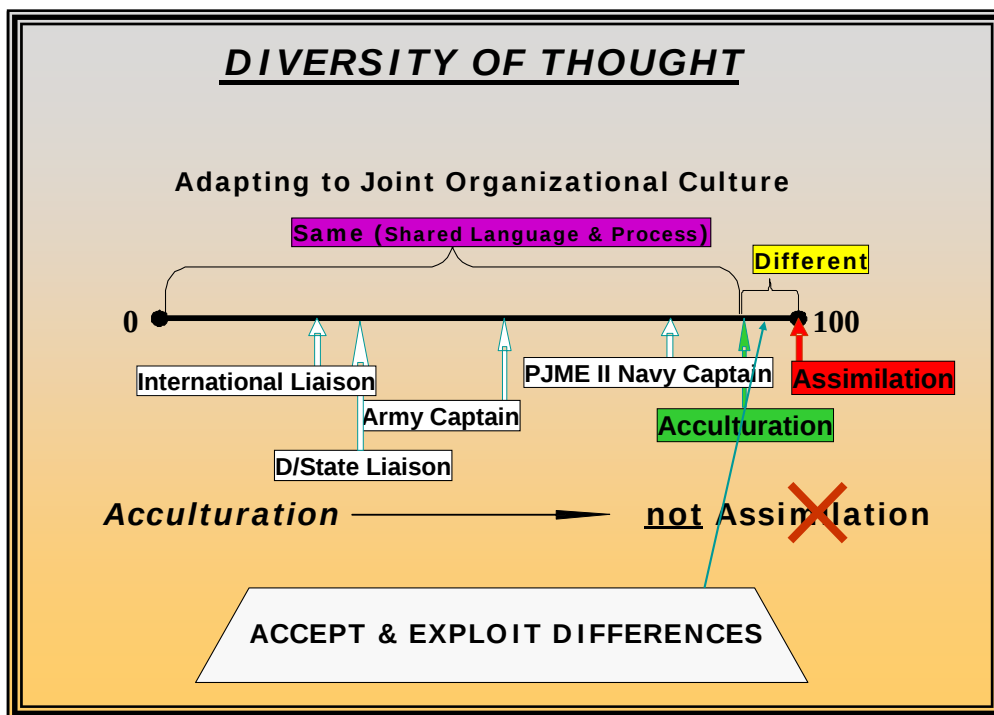


Figure 2. Differences that Matter

Consider differences that matter on the acculturation line in Figure 2. Gender differences, ethnic heritage, service or agency culture and country of origin will each matter in choices and ways of

thinking¹¹. United States service members share certain aspects of uniformed culture with each other, but perhaps are less compatible, initially, with officers from other nations. A common way of talking about ideas, including terms, jargon and procedures, is part of acculturating to a joint planning group. Acculturation means an even exchange of cultural aspects among groups. Respect and value are features of acculturation. Adherence or agreement is not necessary.

Forcing others to set aside their distinctive differences until everybody in the group thinks the same is not merely wrong, it defeats the purpose of uniting a disparate group of thinkers. Including intergovernmental staff or civilian agencies makes acculturation more difficult, but ultimately more productive, by adding a useful point of view. If the organization is trying to require everybody to think the same way, that would be forced *enculturation* (one-way dominant cultural exchange), or *assimilation* (eradication of the original cultural in favor of the new one). Neither is suitable.

While it is important to have clarity of purpose and accuracy in the meaning of shared terms, the suggestion here is that we want to move toward a purposely incomplete assimilation of the various agents to the dominant way of thinking. The goal is the more rapidly achievable partial acculturation of independent agents into the planning team, wherein they retain much of their idiosyncratic thinking as they contribute to reconsideration of the problem set, and to potential resolutions. Presenting the problem(s) to be worked in as open-ended a manner as the situation allows permits originality and useful differences in thinking to arise. It is up to the commander and the commanders' designees to set the conditions for freedom of expression. Once that safety of expression has been established, incorporating trust and active listening in productive conflict, innovative, interactive brainstorming can begin in the group.

Perhaps the reason we are not yet doing more conscious development of intellectually diverse teams is that we have been successful using the current planning processes to conduct joint

operations. That is not to say we are complacent about past victories and methods. We continue to evolve our fighting methods, most significantly in the area of information collection and distribution with real-time utility, with UAVs, digital electronic connectivity from soldier through commander, and brilliant weapons intended to protect the force by being so precise that they can be delivered from standoff range. An additional soft technology force multiplier is the interweaving of diversity of thinking in the development and implementation of joint plans.

The time to integrate conscious application of diverse thought into joint operations is now. One reason we are not doing this integration on a grander scale is the reason we need diversity the most: leaders have not yet been exposed to its potency. Diversity of thought, constructivism, and productive conflict in planning are not broadly understood. They are therefore not broadly accepted or applied. However, once we can see creative and imaginative solutions on operational plans, we may find that focused diversity of thought has a place in planning beyond egalitarian notions of fairness, inclusion, and representation. Diversity of thought may help us win without fighting.

Leveraging Diversity in Joint Military Operations

In business applications of diversity yield an increase in profits; in school, an increase in scores. Supporting diversity of thought is easier with the metrics of profits and grades. Still,

“Research on everything from student groups to top management teams reveals that constructive arguments over ideas – but not nasty personal arguments – drives great performance . . . organizations that are too narrow and rigid about whom they let in the door stifle creativity . . . a series of controlled experiments and field studies in organizations shows that when teams engage in conflict over ideas in an atmosphere of mutual respect, they develop better ideas and perform better.”¹²

Joint services can, and should, take advantage of what we know about the value-added from diversity of thought in productive conflict.

Notions of the value of diversity are not original. Diversity of thought in academia results in imaginative solutions to group problems, and increased understanding of cultures. According to the American Association of Colleges & Universities, diversified learning groups faced with new

challenges routinely deliver higher quality solutions and a greater variety of them.¹³ In agreement with this notion, experienced military leaders came together to prepare an *amicus* brief for the Supreme Court when it was considering the case for diversity at the University of Michigan Law School in 2005. The conglomerate of statesmen, led by retired U.S. Army Lieutenant General Julius Becton, Jr. General Carl Mundy, Jr., former Defense Secretary William Cohen, General Norman Schwarzkopf, and the late former Chairman of the JCS, Admiral William Crowe, argued firmly in their compelling brief that the strength of the American military was in its diversity of persons, and that such diversity was essential not for egalitarian reasons, but because the mix of cultures and ideas that result in the supremely adaptive force that America currently deploys to situations that demand high adaptability.¹⁴

High adaptability is the nature of future conflict. Our adaptability must keep pace. We can use what we already know about forming effective staffs, and then add a degree of freedom to the process by overlaying practical and sometimes intuitive team-building a constructivist model for creating “new” knowledge—inventive solutions that cannot be derived from a single person, nor from conventional approaches to staff planning.

Consider the complexity of desired inputs below. The requirements are representative, not comprehensive; an ill-defined problem may require elements beyond those represented in Figure 3. Since we cannot see the future well enough to predict the nature of complex problems in times to come, we cannot know what those skills or inputs will be, or will need to be, in order to address prospective non-linear problems. The future is, by definition, uncertain.



Figure 3. Complexity of Planning Interactions¹⁵

Seeking imaginative solutions can be disconcerting to those who prefer systematic approaches to problem solving. To satisfy some of that urge for certainty, we can transfer some of what we know from business and academic realms into the military milieu as we consider our routine involvement planning interagency operations with coalition partners.

Practical Military Constructivism

Dr. William Duggan of the U.S. Army War College identifies three elements as requisite for the strategic intuition necessary to solve or resolve higher-order problems: strategic analysis, intelligent memory, and expert intuition.¹⁶ Further discussion of how constructivism influences group activities may reveal its utility in joint planning by developing these skills.

Planning cell leaders already do, intuitively, some of what make the practice of planning more premeditated and to providing a process for creating and exploiting (in the sense of employing to the greatest possible advantage) a diverse-thinking Joint Planning Group. As a start, Joint Publication 3-16 (*Multinational Operations*) emphasizes the necessity of knowing coalition

partners' culture, history, religion, customs, and values as means to enhance cooperative partnership necessary for mutual trust and establishing common goals.¹⁷

What joint publications do not provide is fundamentals to consider when assembling groups of people for planning. Organizing a planning team for success can be as simple as choosing people with known macro-skills—idea people—and supporting them with detail-oriented persons as part of their group in order to allow the broad ideas generated by the macro-skilled members to be concretized for action.

Certain military specialties in each service often attract persons of a particular ilk, and it behooves the officer charged with building teams to be aware that, for example, artillery officers and Navy submariners are quite often exceptionally detail-oriented. Infantrymen from the Marines and Air Force fighter pilots might be more inclined toward creative invention. Readily available personality indexes such as *Strong's Personality Profile* can be useful as a means to match traits. Once the planning teams are composed to get the best available mix of broad-thinking idea-generators and detail-makers, a more structured application of constructivist methods equips those teams with intellectual latitude for innovation and intuition development.

Wicked problems that these innovative planning teams will face are by definition open-ended and intractable. A constructivist approach to resolving such problems permits open-minded professionals and grants unconstrained boundaries on possible problem development and solution sets. The effort is intended to achieve a collective *coup d'oeil*. Chiefs of Planning do not necessarily get to select only open-minded staffers to work the process, so some practical considerations that take advantage of what limited resources they are likely to have (amount of time, number of planners) is in order.

Time is a constraint when addressing wicked military problems. The current conflict in Iraq presents a variety of exemplary wicked problems that complicate U.S. military exit strategy, shift

conditions that foment insurgency, and preclude restoration of exiled intelligentsia to Iraqi government and higher education positions. Computer models can aid in reducing, but cannot solve, these challenges. A shift in thinking will have to occur in how we plan and what types of solutions we will consider. The goal is developing a team of *designers* who can fashion suitable outcomes for the problems and challenges posed by assigned missions. While campaign design may appeal to contemporary leaders, the notion of too much creativity in that design might worry a joint task force commander. After all, what the commander has to work with are people and implements of war developed as part of a familiar paradigm—a paradigm of imposing force in conflict situations that has worked well for decades, and now, it may be argued, a contested dominance. Reservations must be overcome if we are to have problem-solving process that overmatches the complexity of current problems.

If we now posit the joint planner as an active participant in the use of knowledge in the *creation of new reality* as Constructivist Theory allows, that notion can be unsettling to people who like their thinking and their solutions to be familiar, concrete, and targetable. As former U.S. Marine Corps Lieutenant General V.H. Krulak opines: “No amount of originality, logic, eloquence or passion on the part of a subordinate will prevail if a superior lacks the wisdom to stimulate disagreement or the elasticity of outlook to contemplate a novel proposition.”¹⁸ Most of our formal military education is designed to reinforce doctrine, and to promote historical examples as vicarious learning that will preclude experimentation that unnecessarily expends American lives. Still, there is an acceptable degree of innovation that commonly occurs among individual soldiers at the tactical level that has earned American warriors a favorable reputation for being ingenious mavericks. With well-developed planning groups, similar innovation can occur at a strategic and at an operational level. It can be long-term innovation like the Army Transformation project, or it can be localized innovation at a flag commander’s headquarters, as we have seen with successful local

counterinsurgency in Iraq. It is at this mid-level of war where joint planners function that a type of systematic innovation in thinking can be of additional value to the force. A simple example may help readers better understand how diversity of thought can achieve unanticipated and innovative solutions.

In the classrooms of our military institutional instruction, where the class moderator commonly has positional authority, it can be useful to empower the students as co-contributors to the discourse of discovery. With the more mature Senior Staff College and War College students, who have begun to develop expert intuition, empowering them is easier because students have more to contribute. A greater variety of stubborn problems has informed their thinking. However, even young thinkers can be empowered to creative heights.

For example, in the beginning moments of my first-year composition class, I often ask students to offer their opinions on particular life challenges. I connect my instruction to real-world events, situations, and experiences related to more than one diverse culture or gender. This technique of engagement welcomes students into a dialogue of ideas that we then segue into the discussion and writing of the day. One afternoon I asked the cadets how to address a problem wherein my friend and I went to his home together after work. When we stepped through the door, all three of his children ran to me for hugs instead of attending to their father, who stiffened and asked curtly, “Hey, what about *me*?” The tension at his rejection was so appreciable that I avoided going to his home for weeks, choosing instead to visit him at his office. I put the challenge to my students as to how I should handle the situation. Everyone participated. They were both practical and inventive:

“Stop going over to his house to eliminate the competition.”

“Tell him to play with the kids the way you do so they’ll like him better.”

“Have your friend put candy in his pockets—that will make him more appealing.”

“Place stick pins in your pockets—then they’ll start crying and go to him for support.”

And so on. Everybody had a solution to the problem, and most solutions were distinct. One freshman, Cadet Tranh, offered the most unique solution among the dozens I heard. He said, “Sir, what you’ve described is not a problem at all. In my home, we are taught to treat guests with the utmost respect when they come to visit. What you need to do is to teach your children to help your friend experience that enthusiastic welcome when he comes to your home.”

I would never have thought of that. *And that is exactly the point of developing diversity of thought.* Cadet Tranh’s response is evidence of the utility of the concept of diversity of thought. We cannot know what solutions will become available until we set the conditions for those ideas to be heard. Cadet Tranh did not merely identify the problem; he eliminated the entire notion of it as a problem, and replaced it with a wholly new perspective – demonstrating the strength of diverse thinking. Re-envisioning the problem can create a *new, equally real reality* that allows resolution to begin.

Three elements enable this developmental exchange to function: the leader (*de facto* or emergent) sets the conditions for freedom of thought; leaders and planners hear value what others contribute; and the originating team from which the idea for a solution or resolution comes gets public credit for the workable product. Leaders can build joint staffs that function based on this premise, which is based largely on courtesy and respect for others.

We may be making courtesy seem too hard to accomplish. According to the Naval War College’s Joint Military Operations syllabus for 2007, the formation of *ad hoc* coalitions representing a disparate group of nation-states responding to a common threat poses challenges that are more demanding to joint force commanders than a more enduring cooperative alliance, especially when the alliance itself may be considered a critical strength of friendly forces.¹⁹ The statement is true as a practical matter—it is far more difficult in time of crisis to work out

expectations than it would be if more time were available. Another way to consider the challenge of disparate agents coming together for a common purpose is that we may consider it an opportunity to tap that *de facto* diversity of thinking that obtains in such a situation.

General Krulak suggests that introducing novel ideas may not be as agreeably simple as this argument proposes. He notes that creative minds are suppressed in eras where conformity has merit and innovation invites ostracism.²⁰ He established some baseline rules that will aid in generating a pathway for novel thinking to reach the leadership, but he stops short of defining how the environment can be shaped to generate more routine original thinking.²¹ Planners need to know doctrine and the capabilities of their unit(s). Doctrine matters. But planners need not be constrained in the ways that they *think* about available assets and their employment, or in the type of augmentation that might be available, or in the deployment of intellectual assets (minds of the planning team) in the form of “disciplined military minds, harnessed, directed and encouraged”²² that reframe the conditions so that a problem becomes less of a problem even before assets have to be committed. Increasing effective acculturation and inventive problem solving can be a boon to U.S. Armed Forces as we pursue our nation’s foreign policy in an ever more complex world.

Conclusions & Recommendations for Further Research

We are striving to create a planning environment that goes beyond improving command climate to one that pragmatically employs disparate ideas shared commonly in the realms of thinking and learning and planning. Because the Army and the U.S. Coast Guard have been exercising diversity schemes in various environments for some time, we have a preliminary idea of what success looks like in military settings. To understand better the value of diversity in thinking, joint military leaders could:

1. Add a cultural agent to Joint Planning Groups when possible. This person can facilitate the constructivist direction and moderate team learning as members learn to understand how to appreciate the varied thinking of those from cultures not their own.

2. Examine the effects of diversity as the military defines it at the institutions of military education:

A. Implement longitudinal study at military educational institutions with international students (NWC, USMA, MEL II institutions) to verify whether diversity of thought generated by diversity of culture actually generates higher order solutions to group challenges.

B. Develop programs of instruction to learn constructivist theory and practice it in military educational institutions in core classes where group work is done, including academic work and campaign planning. In regular courses, education researchers could follow diverse groups of thinkers in problem solving situations in the same numbered courses with control groups of homogeneous persons over several years as a comparison.

C. At four-year military undergraduate programs, such as those at the military academies, researchers could track performance of the same group of persons during their undergraduate years by placing them in cohorts that work together in group projects (writing, engineering, extracurricular) over multiple semesters or multiple years.

Any of these methods can demonstrate the value of diverse thinking, given an informed, serious attempt. We draw some of America's finest people into military service. Implementing diversity of thought training as part of a critical thinking program of instruction belongs in American military formal education. Pedagogically, the most effective means of making learning permanent is to involve all the senses, and to reinforce the instruction at all levels, from basic entry-

level training (Military Education Level 1) through mid-level education career courses and Military Education Level 4 graduate study in each of the services. That includes the military academies, Newport, Carlisle, and Maxwell.

Ultimately, the pressure on an all-volunteer force to plan and execute the full range of military operations from peace operations to large wars will require efficiencies that we will be better able to create with new ways of integrating what we know in various fields of knowledge that formerly did not make sense as part of military thinking. Synthesizing the pedagogy of constructivist theory with joint doctrine and the principles of war is one area that readily yields the kind of paradigmatic that gives friendly forces a desirable intellectual force multiplier. Joint leaders already possess the power to push the lever; disciplined military minds await encouragement.

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Notes

¹ Paraphrased from Section C paragraph 11.e., “Language and Regional Expertise,” JP 5-0, page II-111.

² Duggan iii.

³ Harper & Hedberg, 2.

⁴ Simon & Pederson 1

⁵ The entire discussion that I have paraphrased here is a five-step productive conflict sequence outlines in detail by Dr. Victoria Simon and Dr. Holly Pederson of Talk Works, Inc.

⁶ Then-colonel Andre H. Sayles, US Army, helped develop the Army Diversity program. The definition of diversity used here is modified from the one found in his unpublished article, “Equal Opportunity Versus Diversity: An Opinion,” which he promulgated to select leaders and staff members at the US Military Academy as they began to implement a local diversity program in December 2006.

⁷ Sayles, “Leading Diversity Briefing.”

⁸ “Goldwater-Nichols Defense Reorganization Act of 1986,” NDU Library

⁹ JP 5-0, *Joint Operation Planning*, paragraph C. 13. b, italics mine.

¹⁰ Joint Publication 3-33 (*JTF Headquarters*) assigns responsibility for building the Joint Task Force (JTF) team, appropriately, to the commander (V-2). Individual augmentation procedures are provided in CJCSI 1301.01C, *Individual Augmentation Procedures*.

¹¹ A contemporary discussion is going on among sociologists and educators about the tipping balance—that critical mass of underrepresented groups in a dominant group. At a certain percentage, somewhere between 13% and 25%, persons from a certain minority cohort cease to be the token contributor, but have enough support to influence group dynamics appreciably. In a planning scenario, a critical mass is tough to obtain. An alternative is to manage selections so that no dominant group exists on the planning team.

¹² Sutton, 17.

¹³ Lawrence, 1.

¹⁴ Becton, 5 “. . . a highly qualified, racially diverse officer corps educated and trained to command our nation’s racially diverse enlisted ranks is essential to the military’s ability to . . . provide national security (emphasis mine).

¹⁵ Joint Publication Collection, NWC 1007.

¹⁶ Hartig, William. "Problem Solving and the Military Professional." Unpublished article at the Naval War College.

¹⁷ JP 3-16, x, I-3.

¹⁸ Krulak, 10.

¹⁹ Joint Military Operations Syllabus, Lesson II-08, Operational Command and Control. Page II-27.

²⁰ Krulak, "A Soldier's Dilemma," 4.

²¹ Seniors make it their duty to bring ideas and criticisms to the surface where they can be analyzed and evaluated; ensure that the path is clear to the top for ideas, opinions, and criticism, and that everyone knows that initiative is respected as a precious military jewel; protect subordinates as they make their mistakes; and do not tolerate patronizing by subordinates.

²² Krulak, 16.