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FEATURED ARTICLES

Cover Photo: Statue in Cherbourg-Octeville, unveiled by Napoleon III in 1858. Napoleon I once remarked that in war "the moral is to the physical as three to one." (Eric Pouhier, http://creativecommons.org/licenses/by-sa/2.5/)

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INSIGHTS

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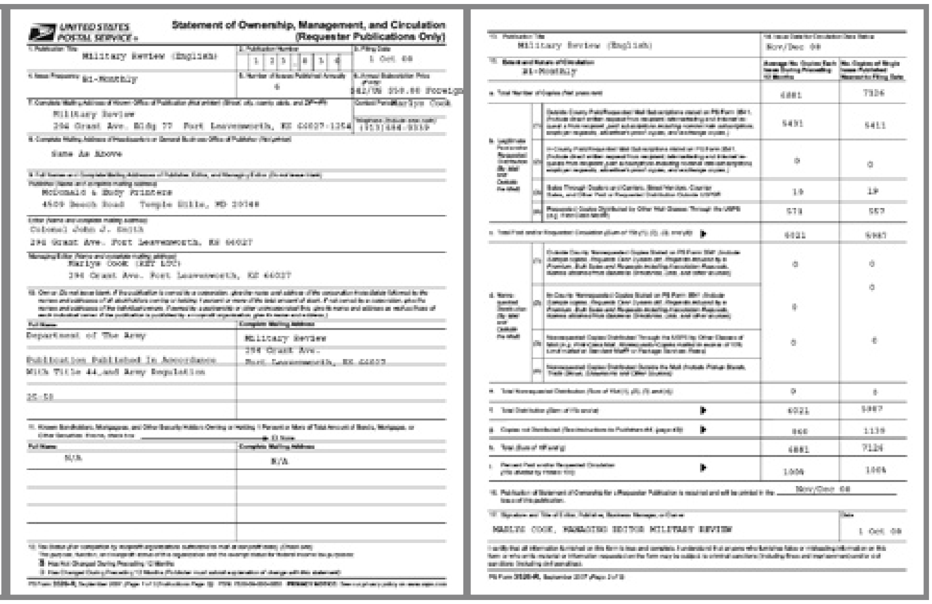

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ENABLE FROM OVERWATCH: MNF-Iraq

General Raymond T. Odierno, U.S. Army

WE SERVE DURING A PIVOTAL PERIOD in the campaign for a secure, stable, and prosperous Iraq. Our coalition forces and Iraqi partners have sacrificed much, and together we have achieved remarkable gains. Today, the Iraqi people enjoy greater freedoms than at any point in several generations. And there is tremendous hope for the future in this ancient land. As we look ahead, we continue to see an evolution of progress in Iraq. As Iraqi Security Forces stand on their own, coalition forces will increasingly *Enable from Overwatch.*

Together, coalition and Iraqi forces will continue to protect the populace while fostering reconciliation, promoting good governance, and encouraging Iraqi men and women to build upon their newly won hope by investing in their communities. Given Iraq's changing environment, accomplishing this will require a subtle shift in how we think about our mission, how we operate to accomplish that mission, and the principles that define who we are.

How We Think

- **Protect and serve the population.** The Iraqi people are the decisive terrain. Enable our Iraqi partners to provide security and help the people of Iraq to invest and take pride in their communities. Foster local governance, provision of basic services, maintenance of infrastructure, and economic revitalization.
- **Understand the complexity of the conflict.** The environment in which we operate is complex and demands that we employ every weapon in our arsenal, kinetic and non-kinetic. To fully utilize all approaches, we must understand the local culture and history. Learn about tribes, formal and informal leaders, governmental and religious structures, and local security forces. We must understand how the society functions so we can enable Iraqis to build a stable, self-reliant nation.
- **Give the people justice and honor.** We want the hands that bring security to be the hands that help bring justice and honor as well. In this complex struggle, strive to be the honest broker. Ensure that complaints and abuses are dealt with quickly and publicly. Provide an environment that creates honorable work, rewards honorable behavior, and emphasizes honorable treatment for all.
- **Foster Government of Iraq legitimacy–Make it easy for the people to choose.** Exemplify professionalism in all your actions and promote the same in our Iraqi partners. Continually develop the capability and legitimacy of Iraqi Security Forces, and give the Iraqi people hope by showing them

General Raymond T. Odierno, U.S. Army, is the Commanding General of Multi-National Force-Iraq. He previously served as Commanding General, Multi-National Corps-Iraq. From late 2006 to early 2008 he was the operational commander implementing the "surge" strategy. General Odierno holds a B.S. from the United States Military Academy at West Point and masters degrees from North Carolina State University and the Naval War College. General Odierno is also a graduate of the Army War College.

PHOTO: U.S. Army GEN Raymond T. Odierno, the commander of Multi-National Force-Iraq, and Lesley Stahl, CBS news correspondent, tour a market in the Sadr City district of Baghdad, Iraq, 18 September 2008. (U.S. Air Force, TSGT Cohen A. Young)

that loyalty to the national government is the best way to improve the lives of their families.

- **Promote reconciliation.** Separate those who promote and practice violence from those now willing to reconcile and become productive members of Iraqi society. Encourage and enable the Iraqi government to reintegrate those committed to peaceful coexistence with their neighbors.

How We Operate

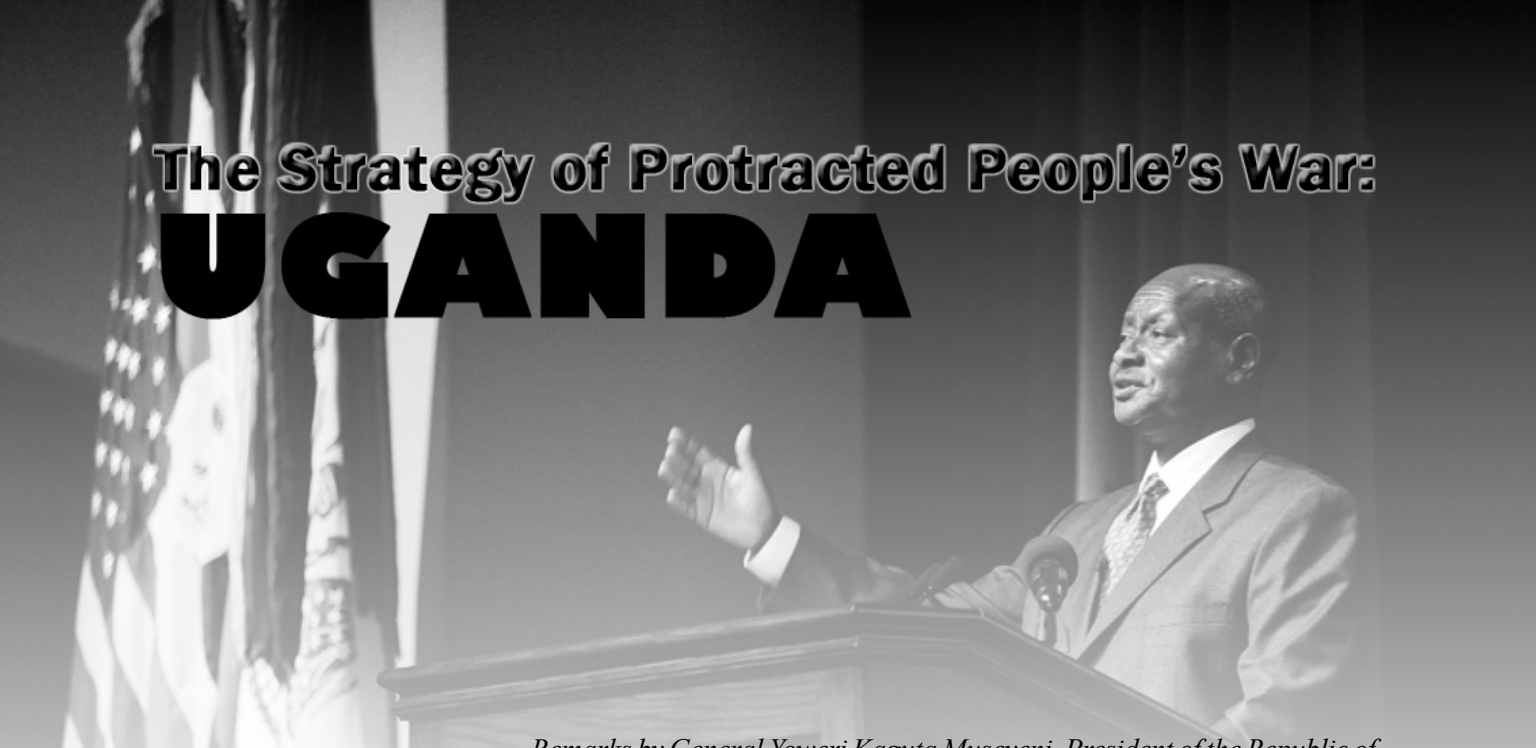
- **Conduct operations by, with, or through our Iraqi partners–*Enable from Overwatch*.** Understand Iraqi systems and capabilities, and help Iraqis make them work. Always look for sustainable solutions. Coalition and Iraqi units must live, work, and fight together, with the Iraqis more and more in the lead. Ultimately, the legitimacy of the ISF in the eyes of the Iraqi people is essential to long-term success.
- **Walk.** Move mounted, work dismounted. Patrol on foot and engage the population—with the Iraqi Security Forces in front whenever possible. Situational awareness can only be gained by interacting with the people face-to-face. Every patrol should have tasks designed to augment understanding of the area and the enemy.
- **Defeat the network, not just the attack.** Defeat enemy attacks before they happen by identifying the network behind attack preparations. Pursue the network's leaders, bomb makers, financiers, suppliers, and operators. Use both lethal and non-lethal means to destroy the network and prevent it from regenerating.
- **Share intelligence.** Establish collection systems and promptly and regularly share information up and down the chain of command and with our Iraqi partners. Know that small pieces of information paint the big picture.
- **Integrate civilian and military efforts.** As we move closer to sustainable security, civilian and governmental agencies will naturally take on more responsibility as we reduce our military presence. Coordinate operations and initiatives with our embassy and interagency partners, our Iraqi counterparts, local civilian leaders, and nongovernmental organizations to ensure all are working to achieve a common purpose. At all levels, continue to build Iraqi capacity to independently execute governance functions.
- **Transfer security responsibility.** Enable Iraqi units to accept security responsibility as local conditions permit. Don't rush to failure. Closely supervise deliberate, well-coordinated transitions that preserve security gains and maintain momentum. "Thin" our presence in sector, but stay engaged, and maintain situational awareness and vigilance in protecting our force.

Who We Are

- **Be first with the truth.** Communicate accurate information—good or bad—to the chain of command, to Iraqi leaders, and to the public as soon as possible. Preempt rumors and beat the insurgents, extremists, and criminals to the headlines. Hold the press (and ourselves) accountable for accuracy and context. Challenge enemy disinformation. Turn our enemies' extremist ideologies, oppressive practices, and indiscriminate violence against them.
- **Have realistic expectations.** We have made great gains, but much remains to be done. The enemy still has a vote, and progress may sometimes be slow. Make no premature declarations of victory, but identify and share successes and champion the Iraqi people's cause.
- **Live our values.** Stay true to the values we hold dear and that distinguish us from our enemies. This endeavor is often brutal, physically demanding, and frustrating. We all experience moments of anger, but we can neither submit to dark impulses nor tolerate unethical actions by others.
- **Leaders make the difference.** Warfare has never been more complex or required more imaginative leadership. Leaders should empower subordinates and push decisions, resources, and authorities to the lowest level possible. Provide appropriate right and left limits for subordinate leaders and give them the flexibility necessary to be imaginative and adaptive. Communicate with your subordinates daily to ensure awareness. Leaders are the barometers for their units. Do what's right and trust your fellow troopers to do the same.

Many challenges still lie ahead. I salute your professionalism, your skill, and your extraordinary dedication in this complex environment. The world watches our progress with great anticipation. You are the authors of one of our era's proudest chapters of military history, and I am honored to lead Multi-National Force-Iraq as we put to practice these tenets of counterinsurgency. ***MR***

The Strategy of Protracted People's War: UGANDA



Remarks by General Yoweri Kaguta Museveni, President of the Republic of Uganda, to students and faculty of the Command and General Staff College, Combined Arms Center, Fort Leavenworth, Kansas, on 26 September 2008.

President Museveni's speech was initially transcribed by STRATCOM, USACAC, and further edited by Military Review *for length and readability.*

THE GENESIS of my coming here was a few months ago. I had come here to attend the graduation of my son, who was a student here. Now, Lieutenant General Caldwell invited me for lunch. When we were having lunch, the audience around the table—the American audience—were very curious about Uganda's history. Then I said, "By the way, if you are interested, I could come back to Leavenworth when I come back for the United Nations General Assembly," because I normally come to the United Nations—not always to do so much useful work there—but to put in an appearance for whatever it is worth. Now since I come all the way to do not so useful work in the United Nations, I told the general that I could come two more hours here and I would come and share Uganda's history with you.

The reason I also thought about this is that the United States and Africa lost time in the 1950s–1960s. Your leaders in the 1950s–1960s did not understand our cause—did not understand the cause of African nationalism. We, therefore, at that time mainly worked with the Russians, the Chinese, and those Eastern peoples. We are not communists, but because you did not come to help, we got help from where it was available. And that's why our armies really did not work with yours for much of the 50s and 60s. It was only recently in the 1970s and 80s that, especially the armies of liberation, those who fought for freedom, did not have initial contact with you.

So, I was conscious of this and when I met the general, I said, "Now this would be a good chance for us to close that gap." Hence, the genesis of this talk. It is partly for you to understand what goes on in the mind of a revolutionary fighter. Secondly, it is for us to close that gap. The relationship with the United States is now very good—not only with Uganda but with many of the African countries. So that difference of opinion has been cured, but I don't think we have synchronized our histories, especially of the Army. And that's why I am interested in this talk.

General Yoweri Kaguta Museveni is the President of the Republic of Uganda.

PHOTO: General Yoweri Kaguta Museveni, President of the Republic of Uganda, speaking to students and faculty of the Command and General Staff College, Fort Leavenworth, Kansas, on 26 September 2008 (DOD, Don Middleton)

Now, the topic I'm going to talk about is "The Strategy of the Protracted People's War." The Protracted People's War is a strategic instrument in the hands of the oppressed against the oppressor, whether he's local or foreign. It is a strategic instrument, and you who study about strategy, you know what that means. It is a means that can be used to change a situation completely, from A to Z. However, the Protracted People's War is only possible under certain conditions. It cannot take place under all conditions, and I've been able to think of five conditions that must exist before a Protracted People's War is fought and won.

First: There must be extreme and widespread oppression—enough to generate desperation and resentment by a wide cross-section of the population. This oppression would not only include denial of political rights, which sometimes is a bit remote in underdeveloped societies, but more especially, it must include land alienation—taking land from the population; extra-judicial killings; desecration of cultural sites; suppression of a people's culture, including language; and such other extreme measures. This is condition number one. There must be widespread oppression, especially involving taking away of people's land and assaulting their identity.

This was, for instance, the situation in the Sudan. You must have heard of the Sudan. Sudan is a place where Africans live side-by-side with Arabs. I'm sure you know those people. You can tell an Arab from an African. I'm not an Arab. I'm an African. In the case of the Sudan, the black people lived together with the Arabs. However, some of the Arabs wanted to make the Africans [into] Arabs, and that was a very big issue. That has caused all of the problems you must have heard of in the Sudan.

Second condition: It must be clear to many people in the oppressed community that there is no other peaceful option to get them out of their oppression, that armed struggle is the only option. If the people think they can use elections— [that] they can use other means to solve that problem—then it will be very wrong to propose using war. Therefore, the Protracted People's War must be a means of last resort.

Three: The other crucial factor is the terrain, the terrain of the country. If you are fighting in the urban areas, [that is] the political environment, which somehow is linked with number one—meaning that you should have either favorable terrain or you should have overwhelming [political] support if it is an urban area.

Number four: External allies for or against the revolutionary cause may also act as catalysts to expedite the liberation process or slow it down. I'm sure you remember the war in Vietnam. The support by the communist bloc for the war of resistance in Vietnam played a crucial role in the victory of Vietnamese nationalism and reunification of Vietnam. The support by the Western countries for the mujahideen in Afghanistan helped to defeat the Soviet occupation in that country.

The rear bases provided by Tanzania and Zambia to the liberation movements in southern Africa enabled our brothers and sisters there to defeat the white racist regimes in Mozambique, Zimbabwe, Namibia, and South Africa. There are some cases, however, where the revolutionary forces received little or no external aid from outside, but they defeated the repressive forces. The examples of Cuba—that Castro man who you are struggling with near here—and Uganda stand out in this connection. In these two situations you did not have significant support from outside, but from within. The revolutionary leadership was able to get enough resources to bring down the dictatorship.

In Uganda, having started with 27 rifles, we received only 92 rifles and 100 land mines from outside between 1981 and 1985. All the other equipment we got from within Uganda at the expense of the enemy regimes which we were fighting. The government forces were our weapons suppliers and quartermasters—two in one. The regime would import arms and we would capture them. The enemy, therefore, was our weapons procurement agent as far as importing weapons was concerned. But here I was talking about the question of external support. External support is crucial, but not always necessary. If the conditions are right, you can prosecute a revolutionary war even from the internal resources.

Number five: There must be a revolutionary leadership able to do two things: articulate how much better the future will be when the revolutionary forces win, and convince the people by advocacy and actions that it is possible to triumph.

That leadership must convince the people that, first of all, the future will be better and, secondly,

it is possible—it is doable. Because, initially, the people are skeptical; they may be feeling oppressed but they doubt whether that method can work or not. It is up to the leadership to convince them that it is desirable and doable and feasible.

An intellectual leadership is very important to deal with these issues. If you have a mediocre type of leadership, they may not be able to deal with both the theoretical issues of the struggle, as well as the practical issues. In fact this is the problem for many of the resistance movements.

Those are the five conditions that in my view must exist for a revolutionary war to be started, sustained, and successfully concluded.

Once you are sure that the objective conditions exist, that on the ground there is oppression, there are what you call subjective factors. Subjective factors mean people's understanding of the realities on the ground, but the people may not grasp that reality. That means there is a discrepancy between the objective conditions on the ground and the subjective factors. So it is up to the leadership to ensure that they wake up the population so that they can see both the desirability and the feasibility of the struggle.

There are some groups, if you remember—those who are old enough or through your readings—that emerged in different parts of the world. Some of the groups were in Europe, like for instance the Baader-Meinhof group in Germany, like the Japanese Red Army. These groups thought they could bring revolution in Europe using violence—but they did not study the objective conditions in Europe. The right conditions did not exist.

Now such groups, we call "adventurists." We call that "adventurism." When you push for a cause and you want to use violence, but conditions do not permit that type of method of solving your problem, the name we give you is that you are an adventurist.

The strategy of a Protracted People's War hinges on two factors. You realize that, strategically, you are strong and the enemy is weak; however, tactically, you are weak and the enemy is strong. If you don't realize that, you are going to make very big mistakes.

That's what Mao Tse-tung meant—those of you who have heard of a man called Mao. Mao Tse-tung. That's what he said as one of his conditions. He said, "In the long run all imperialists are paper tigers. Strategically, we must despise the enemy; tactically, however, we must take him seriously." That's what he means, in the long run you know that I, [the revolutionary], am stronger than this fellow because my cause is just. The majority of the people support me but they are not organized well enough now, so in the short run I am weak. Therefore, the purpose of the Protracted People's struggle is this process of gradual mutation in the balance of forces between the protagonists that constitute the Protracted People's War. Initially, in the short run the revolutionary is weak, but in the long run he is strong. Why? Because his cause is just. Therefore, in order for you to allow that evolution to take place—that evolution of the revolutionary from weakness to actualize your potential strength—you must design your tactics very, very carefully.

In the beginning, avoid head-on collision with the enemy forces. Dominate the enemy, but preserve yourself. This is the very important principle of that war: first of all, you survive. Survival, for the insurgent, for the revolutionary, is in itself a success. When he survives, that mere survival is a success and it is part of the primary aims of the revolutionary. Avoid annihilation. In order to avoid annihilation, you must make sure to fight battles you are absolutely sure about. Otherwise, avoid the enemy. If you read Mao Tse-tung you will see that when the enemy advances, we retreat; when he retreats, we advance, like that. Therefore, in the initial stages, the revolutionary must avoid head-on collision, must attack targets which are weak. I will talk about that in a minute.

But the revolutionary war itself has four phases. Phase one is political agitation and clandestine operations. Hitting here, hitting there, targeting intelligence staff of the other side—that is phase number one. Phase number one is to prepare the people and shake up the system.

Phase two is guerrilla warfare. In guerrilla warfare you form groups which attack those soft targets—police stations, policemen on duty, blowing

Initially, in the short run the revolutionary is weak, but in the long run he is strong. Why? Because his cause is just.

up infrastructure. The African revolutionary wars are different from the Middle Eastern revolutionary wars. This is something you should know and bear in mind. And that's why we won and the groups in the Middle East have taken a very long time to achieve their aims. Because in Africa—you remember one of the conditions I mentioned—there must be a revolutionary leadership. A revolutionary is like a holy man, but using guns. If you can imagine Jesus wielding a gun, that is a revolutionary.

You must never do anything wrong. Therefore, when you select targets, you must select them very carefully. First of all, you must never attack noncombatants. Never, never, never, never! You would never have heard that Museveni attacked noncombatants, or that Mandela blew up people drinking in a bar. Why do you bother with people in a bar? People in a bar are not political, they are just merrymakers. Why do you target them? Targeting people in a bar is bankrupt. [Hijacking] aircraft is rubbish. The police station, the policeman on duty, [are the targets] Not [the policeman] off duty, no. The target must be armed, soft but armed. Infrastructure—if you blow up a transmitting station, there's no humanitarian consideration. You just blow it up. This is the difference between the revolutionary warfare in Africa, which we fought, and what goes on in the Middle East. So, in the guerrilla phase, you aim at soft targets. That is the second phase.

The third phase is what you call mobile warfare. That is when you are able to operate like a battalion or brigade size unit and go and attack, mainly in the rear of the enemy. In our case, when we started operations we concentrated them in one area called the "Luwero Triangle." This Luwero Triangle has 3,600 square miles of land, and it was a forested area. That's where we concentrated all our operations. Then the regimes collected their soldiers and flooded them into that area to crush us. By so doing, they removed troops from their rear, and by this time we had gained strength, so we attacked into their rear to capture weapons and so on. So that is phase three.

Now the final phase is conventional warfare. I normally hear people talking of guerrilla warfare as if it is a parallel form of warfare. No, guerrilla warfare is a phase. But in the end, for the cause to win, you must fight conventional warfare. Unless, of course, you weaken the other side through guerrilla warfare and then the other side negotiates, and you get a political settlement. There is also that possibility, when the other side does not wait for the conclusion of the whole affair militarily. But if you are to win, you must eventually fight conventional warfare.

AFP, Peter Busomoke

Supporters welcome Uganda's President Yoweri Museveni in Luwero District, Uganda, 23 December 2005.

During phase one, when the revolutionary stages an agitation [and conducts] clandestine operations, then training starts—military training. The leaders select some people who are very reliable and start training them. The whole population may not be aware that training is going on because you select the most advanced, the ones who are most committed. And this training has four components: ideological, organizational,

military, and political. A revolutionary is first and foremost ideological; military is second. When he is committed, it will be easy for him to undertake any assignment. That ideological training is most important, even more important than the military. The military is a means in the hands of the vision of the revolutionary.

Now during much of these phases, the revolutionary has always used the principle of "need to know." You don't broadcast information to everybody. You only give somebody what he needs to know in order to do his work. And you avoid bureaucracy. Recently I laughed [when] I was in Uganda and I saw on TV that there's a group in Colombia, they call them "something-something." Now that group had computers and they had information in the computers—those are amateurs. Information must be in the revolutionary's head, not on any piece of paper, especially future plans. If you [the revolutionary] attack and capture the materials—yes, you can record it—but also the enemy knows because the enemy knows what he lost. You can record that you captured so much ammunition, that one you can record. But plans, plans, plans—should never be on paper, should never be anywhere. So when I heard of that group in Colombia, I think those people [the Colombian military] are lucky to have such a group to fight.

During all these phases, [from] the phase of guerrilla warfare [through] the phase of mobile warfare, you should never attack the enemy who is entrenched, who is in the trenches or who is prepared. You should attack the enemy on the move. Always lure out the enemy, get him out of his camp to come and look for you. That's when you wait for him. He's slightly more vulnerable than when he is camped.

Earlier, I talked about the revolutionary's ability to survive constituting a form of victory, but that's not enough. If you survive without growing, then you are not succeeding. Survival must also involve growing: growing in terms of numbers, in terms of more cells, in terms of equipment, in terms of accouterment. If you are just there surviving, then you are a bandit. So [if you are] fighting the revolutionary and manage to stop him from growing, then you can regard it as a victory on your side.

A revolutionary is first and foremost ideological; military is second. When he is committed, it will be easy for him to undertake any assignment.

I had talked about the targets in the other phases. Attack police stations; attack policemen on duty because they are not in great numbers; blow up infrastructure—railways, power lines, waterworks; attack intelligence staff; scare away government administrators—don't kill civilians! Civilians should not be killed if they are not armed—even if they are for the government—you scare them away, [tell them] "Don't come back here. If we find you here again, you'll see." The fellow will just run away. You don't have to kill. And that, by the way, is also part of building the prestige of the revolutionary movement. Because the word goes around, "These people are not killers! They could have killed me. They captured me. I was in their control but they told me to go away." Very big, very big—you are now like Jesus, but armed—armed Jesus. Just scare them away. You come and arrest him. "You, fellow, we told you to go away." Because, what is your interest? You want these people, the administrators, to leave the area so that the government has no control there. That's what you are interested in. You are not interested in killing them, just scare them away.

Ambush army vehicles so that they are forced into convoys—that's very crucial. You ambush vehicles so they stop moving as single vehicles, [because] when they form a convoy, that's very good because they are slowed down. They are no longer so fast.

During phases two and three, guerrilla warfare and mobile warfare, we fight battles which we call "battles of quick decision." You should always fight battles of quick decision. In guerrilla warfare, don't fight for more than 20 minutes. When you reach the phase of mobile warfare, you can fight, like, for three hours, depending on what sort of enemy you are dealing with. Because if you linger around there, then the enemy will bring reinforcements and you will be overwhelmed. So you must attack, then go away quickly. You [cause] damage, [then] get out of harm's way. We, therefore, talk of fighting battles of quick decision in a protracted war. The war is protracted, but the battles are short.

For the revolutionary warrior, war is a very clear business. Don't fight a battle from where you expect to expend more ammunition than you will get from the captured equipment. So, it's a business. The profitability ratio must be very high. You expend 10,000 rounds, you must expect to get about 30,000-40,000 rounds of ammunition. If you expend 10,000 rounds [and] you get 5,000 rounds, that's a loss and you should never fight such battles because you are getting weaker. If you squander your resources, you are making a very big mistake.

Now, eventually, in mobile warfare, we opened a second front in the Rwenzori Mountains. And eventually, we launched a strategic counteroffensive and from that time we were fighting conventional war.

Command, control, and communication. As we were fighting, we evolved two types of forces. [One] we called "zonal forces." In this phase of guerrilla warfare you don't communicate much. You meet as leaders and you agree, "We are going to do this and we shall do it like this." Then you disperse to your different areas. When you disperse, you don't communicate again. Each leader attacks in the agreed way. But you don't communicate, you don't report back, "You know today we did this…" No, no, no, no! The enemy will be the one reporting on his radio. BBC, they will be reporting for you. You don't have to talk about it, you just do. That's very important. It avoids leakage, it avoids interception by the other side. Because if there is too much traffic—radio, telephone—that is very dangerous for the revolutionary side.

Then the second type of forces are what we call "mobile forces." These are under the control of the top leadership, especially in the third phase, and these are the ones that get central directions to go and attack this one, attack that. Otherwise, the zonal forces are dispersed. You agree on the targets, you go and act separately, and then you can convene, like, after one year, to see what has been achieved and the way forward.

For security, we never discussed in houses—wouldn't sit in a house like this and start discussing plans—never. Always discuss in the open field. Therefore, for command, some of the command is dispersed, some is concentrated. Communication is by courier. You avoid using your radios, telephones, and so on.

Discipline. As I told you, a revolutionary warrior is like Jesus. You must not drink alcohol, you must not mistreat civilians, you must not take liberties with women, and, as Mao Tse-tung said, "You should never take a single needle or thread from the people without paying for it." And in case one of our soldiers commits a mistake, especially killing people, he must be punished where the mistake was committed, in front of the people. If you take him away to punish him somewhere else, you are in trouble with the population, especially a population which is not educated. Because they will not know whether you punished him or not, they will think that you have just covered him up. So that discipline is very crucial for the revolutionary cause to succeed.

AFP, Alexander Joe

Ethiopian Prime Minister Meles Zenawi, Tanzanian President Benjamin Mkapa, South African President Thabo Mbeki, Kenyan President Daniel arap Moi, and Ugandan President Yoweri Museveni pose for a photo in Arusha, where they gathered for a one-day Burundi summit, 1 December 1999.

Since the Vietnam War, there has been a lot of technological improvement in the weapons—the smart bombs, better observation, overhead imaging, thermal imaging, acoustic ways of getting information. Now, does technology make it impossible for a side that is weaker technologically but correct in

terms of justice to wage a resistance? My answer is, "No." [The weaker side] needs some change in the tactics. For instance, if [the technically superior side] can detect through remote means people who are hiding in the forest, the revolutionary warrior can still find a solution to that. What would be the solution? Be with the people where the people are—especially in the other phases. Be with the people so that it will not be easy for [the technologically superior side] to know who is an insurgent and who is not an insurgent.

In conclusion, I think it is still the old story. The real answer to a revolutionary war is political reform so that you deny the other side the reasons for getting support from the people. I think this is the real strategic answer to a revolutionary challenge. Thank you very much.

Question and Answer Session

First question: *Sir, you recently spoke at the United Nations in New York. What do you see as the future role of the United Nations in Africa?*

Museveni: The United Nations needs to be serious. They are not serious. The United Nations is full of careerists. You know a "careerist?" A careerist is a "job-doer" who is doing the job as a career—as a job. But we need people of conviction in the United Nations, and this is totally lacking. They, therefore, don't do good work. They make a lot of mistakes, but having said that, I am for reforming the UN, not for scrapping it. If you scrap it, then you have no other forum, so I think the answer is to reform it. But, they are not doing too good of a job, in my opinion, especially in peacekeeping and so on; but even in development issues, like when they are talking about what they call MDGs, Millennium Development Goals. Now what they did, they set up social indicators. Infant mortality should be brought down to so many, so should maternal mortality. But the question is, *how* are you going to do that? Are you going to use witchcraft? Or are you going to use development?

Now one of the biggest problems of Africa is exporting raw materials. This is part of our struggle now. Take Uganda. Uganda is the fourth biggest exporter of coffee in the whole world. Of course we are now changing this, but in the past we'd get one dollar per kilogram of coffee. And when it is taken to somewhere else—to a group called "Nestlé"—they roast it, grind it, and for them, they get twenty dollars for the same kilogram for which I got one dollar. That means, therefore, that Uganda is giving aid. Uganda is a donor to some of these countries for nineteen dollars in every kilogram of coffee.

We are not losing only the nineteen dollars per kilogram of coffee, we are also losing jobs. Those jobs are taken, they are exported. Now if you don't deal with that, then how will you deal with the so-called millennium development goals? If someone does not have a job, how can you eradicate [his] poverty? And how will people have jobs if there is no industrialization?

So, the UN has a lot of weaknesses, but I think they are curable.

Second question: *Sir, is there any concern within your country and other African nations for the increasing influence of China throughout Africa?*

Museveni: Oh, China! Oh, no, no, no! We are very happy with China. Some people have asked me this and it's really good that we talk about it. First, China has been a good influence up to now. They may change in the future, but up to now, they have been a very good influence. Why? Well, first of all, when we were fighting the colonialists, [the Chinese] gave us weapons, which was very good. When we would come to the United Nations—to the United States—Henry Kissinger, all those people, they would give us the Bible: "You go and preach to the oppressor." But the oppressor was not listening to the verses of the Bible, he wanted some force. And the Chinese gave us support to get rid of the colonialists in Africa.

But now, the important roles of China and India both are as follows: African raw materials had gone down in value. The price of steel had gone down. The price of copper had gone down. The price of all

The real answer to a revolutionary war is political reform so that you deny the other side the reasons for getting support from the people. I think this is the real strategic answer to a revolutionary challenge.

commodities had gone down. Why? We are being told that there is too much steel in the world. Let's take the example of steel. There's too much steel in the world, so the price goes down. But why was there supposed to be too much steel? This was, of course, an aberration. It was a misperception. But what they meant was, [there are] people living a rich life of affluence—in North America, the United States and Canada, western Europe and Japan—in good houses, driving cars, and so on. The rest of the world is living in very bad conditions. So what happens? Because of the reforms of Deng Xiaoping in China and the reforms in India, hundreds of millions of Indians and Chinese have now moved from peasant to middle class. So they are living now in good houses.

What does that mean? The price of steel goes up. The price of cement goes up. The Chinese, they [were] walking, on the streets of Beijing, walking or cycling. They are now driving. What does that mean? That the price of fuel goes up. And who is sending fuel? Uganda. Not bad. The price of steel goes up because of more cars. The price of food goes up. So it's very good. The Chinese have become a very big group in the world economy. So the commodity prices have now gone up, the food prices have gone up, and I'm very happy in Uganda. Our economy is growing very well—nine percent per annum. Why? Because we produce a lot of food. We have always produced it, but we had nowhere to sell it because the markets were blocked by protectionism. Now, because of hunger in the world, the whole world is crying for food. So the Chinese and Indians are a good influence.

But, Africans—we are taking no chances. We were colonized once; we shall never be colonized again. We don't want to sit down, because we don't know. When China becomes a superpower, suppose they also become aggressive, and they say, "We are too many in China." Africa is a very big continent. Africa is 11 million square miles of land. You can fit the United States, China, India, and Argentina all into Africa and they would fit. Now suppose the Chinese say, "There is empty land in Africa, we want to go and live there," when they are a superpower. That's why we are talking of African integration—economic, political integration. We are even now working for the political federation of East Africa. We want east Africa to become one country. Our brother Muammar Gaddafi from Libya, he wants the whole of Africa to become one country. Some of us are saying "That's a bit too much." But, certainly, the political map of Africa will change.

And why do we do this? We want to implement our Lord's Prayer—our Lord is Jesus Christ—[for] those who are not Christian. Our Lord's Prayer says, "Thou shall not lead us into temptation, but deliver us from evil." We don't want to lead anybody into temptation by remaining weak. Whilst you are weak, you lead people into temptation, to think that they can control you. And we don't want that to happen again in Africa.

Third question: *Mr. President, your last comments lead me to my question. What do you see is the role of faith and religion in the protracted war?*

Museveni: Maybe what I did not clarify is that for revolutionary warfare to succeed, it must be ideologically correct. And what does that mean? It means you must be fighting for just aims. I talked about it, but indirectly. Now if you fight for religion, per se, I don't think you will be fulfilling that condition, because you find sometimes some of the old religious beliefs. In older religions you find that, for instance, the role of women is handled differently. In fact in some of the religions, women are suppressed. Now if you set out with that ideology of—the English word is atavism—atavism means when you want to go back and live like the people lived in the olden days—I don't think you will go far, especially if you are dealing with people who know what they are doing, because they can mobilize the sections you are neglecting against you and you may not win. So, sectarianism, in my opinion, is not one of the conditions that can be covered under revolutionary warfare. Revolutionary warfare is a war of liberation liberating the broadest possible sections of the population. Now, if you are not liberating women, and women always form 51 percent of the population in all countries, whom are you liberating? I think those are some of the adventurists. Some of the efforts I would classify as adventurist, or even reactionary adventurist, or even reactionary.

Question four: *Sir, what are your thoughts on the establishment of AFRICOM?*

Museveni: AFRICOM. General Ward came to see me—he told me about it. In Africa, generally,

we don't like foreign bases. We don't want foreign bases—somebody brings and puts a base there—that's what we don't like. In fact, I think there are resolutions of the African Union against that. But, we normally work with the United States in some situations. Like when there was a problem in the Congo, the American Army came and used the Entebbe airport. On an ad hoc basis, we can work together. But what we would not accept is to have a situation where part of our country is a base of another country. Africans are totally against that and in my opinion it's not necessary. So if AFRICOM stays where they are and once in a while they come and we coordinate on an ad hoc basis, I think that would be good enough. But it's good to have a group—an American Army group and a command—which concentrates on the problems of Africa. I think that's good, because they generate knowledge, they generate information. But bases in Africa is very, very controversial. They would not support military bases on a permanent basis.

Question five: *Sir, after you won your insurgency, how did you ensure long-term peace amongst the people? How did you reconcile the people?*

Museveni: Those that you call "insurgents," in Uganda we call "terrorists." We call them terrorists because they were proxies of Sudan. You know we had a problem with the Sudan government. As I told you earlier there was this problem of Africans and Arabs in Sudan. Now the Sudanese suspected that, one day, we may side with our black brothers in their internal conflict. They, therefore, wanted to get rid of us, and we were not very interested in being got rid of. So we had to fight. And now that the issue of Sudan is over, we don't have any other political reason inside Uganda that could cause a sustained war. But secondly, our army was also growing at that time. It was still a one-service army, just with infantry. Now we are a bi-service force, we have all the means to guarantee peace in the country and there is total peace in the country.

Question six: *Sir, I have two questions I'd like to ask you. My first question has to do with going from a military officer to that of a president. What are your visions toward insurgency, extremists, poverty reduction, and equal distribution of wealth in Africa as a whole? My second question is, as we know that the Organization of African Unity has been changed into the African Union, what is your own role as it relates to the Global War on Terrorism?*

Museveni: On the distribution of wealth in Africa, the biggest challenge in Africa is transformation—social, economic transformation. That's what I was telling the United Nations. You know, the difference between Europe and Africa is that, if you go back to about 1400, you'll find that the level of development in Africa and in Europe was not very different. But the problem was that since 1400 or 1500, European societies have been metamorphosed. I always like to use that word, metamorphosed. It's a biological term, which means an insect evolving from egg to caterpillar to pupa to mature butterfly. The European society had been metamorphosed from feudal societies—peasant societies—to middle class, skilled working-class societies. African societies up to now are still peasant, or even feudal in some cases. That's where the challenge is. The challenge is transformation, not just distributing, because what do they have to distribute? Sometimes they are just distributing poverty. But the challenge is transformation. And how do you do transformation? First of all, education for all, education for everybody. Secondly, private-sector-led growth—the private sector leading the industrialization of Africa—now that will create jobs for people. They are the people you have sent through school. Jobs would enable you to collect more taxes for the government and so on. So I do not think the primary issue is wealth distribution. I think the primary issue is transformation. Yes, distributing wealth may help in the process of transformation, but I don't think it is the primary solution. Because even where it is done, if you do not have wealth to distribute, you may not go very far.

Now, the Global War on Terror. Uganda supported President George Bush when he went to Iraq the other time, mainly because of our experience with the terrorism of Sudan, we do not like terrorism. And I've told you that we have a difference of opinion. In colonial times, we used to belong to the same group as the Arabs. We used to call it the Afro-Asian Solidarity Group. We were together with the Indonesians, the Indians, Nehru and Nasser, the Arabs. But I've been talking to some of the Arab leaders—we really don't agree with their methods. I've already talked about it in my speech. Why do

you hijack a plane? You know, women who are pregnant, they are in the plane going to antenatal care—now you hijack that one. What sort of revolutionary are you? So, we do not support terrorism. We don't think that terrorism is the right instrument for a revolutionary force. I know the Palestinians have got issues with the Israelis—they are entitled to their homeland—but the methods they use—we do not associate ourselves with them.

Now regarding the Global War on Terror, I happened to have met President Bush the other day when I was in New York, and I had met him last year. And last year I suggested to him that we should have a United States-African Union summit so that we can talk about these issues. We have had a summit with China—the Sino-African summit in Beijing—we had a summit with India, we have had a summit with the European Union. And I have proposed to President Bush that we should have African Union-United States summit so that we can talk about these issues. Now, pending that summit, I would not like to give more views on that matter because I would want us to discuss it directly—how to move forward. But, generally speaking, we do not support terrorism because it is not necessary. As I said in my speech here, you can fight without being a terrorist. I am a revolutionary; I have never been a terrorist. And terrorism is not about the cause, it is about the methods. When you target noncombatants, you are a terrorist. When you use violence indiscriminately—a terrorist is the one who uses violence indiscriminately—that is a terrorist. And we do not support that.

Last question: *Mr. President, I had the privilege of being deployed to Uganda from April of '06 to August of '06 and was the OIC—the officer in charge—of training the Uganda People's Defence Force, about 300 UPDF soldiers. And seeing their spirit—their active learning—really, truly impressed me. What do you see as the future UPDF role in reference to Somalia's struggle for strong governance and independence?*

Museveni: Thank you very much for contributing to our training. Our role in Somalia is to try to help the Somalis rebuild their state. And we are there to help them. First of all, we defend the airport and the seaport and the government house, which we defend all the time. When the terrorists come to attack us we just send them off.

But, more important, we'd like to see ourselves as a catalyst in building the Somali army and police by training them. And even the other day we had a small meeting in New York, which involved Assistant Secretary Jendayi Frazier of the United States, the prime minister of Ethiopia, and some other people. We were discussing this very point. If only the Somali government would also deal with the issue of revenue collection, because when we train people and they are not paid then they disperse and become part of the militia. And it would be good if the Somali government, or that wonderful United Nations—if the wonderful United Nations could pay the Somali army for, like, one year or one-and-a-half years—and in the meantime the head of the Somali state starts collecting their own revenue, it would be easy to rebuild that country. Because the Somalis are fighters, they are easy to organize. They just need leadership. But the Somali government must collect revenue to pay the soldiers. And our job is to guard those strategic centers, and also train the new Somali army.

I thank you very much.

General Caldwell's Concluding Remarks

For you all who don't know it, when the president was here in June for his son's graduation we were captivated by the fact that he was a leader in his country's movement to bring back the power to the people. And listening to his stories was absolutely fascinating—a first-hand, personal account over many years—and then to hear what he has done today for the people of Uganda as he serves them still now as their president.

Sir, you're true to your word. You told us in June you would come back and as a president of a nation. I'll be very honest, we had very low expectation [of seeing you again] with the demands on your schedule! But we are extremely honored that you took the time and came back to share with all of us here today your experiences. We are very much enriched and enlightened by what you had to say and we appreciate it very much. Thank you, sir. ***MR***

RETHINKING IO

COMPLEX OPERATIONS IN THE INFORMATION AGE

Brigadier General Huba Wass de Czege, U.S. Army, Retired

OPERATIONAL PARADIGMS that might have seemed sensible 15 years ago confuse more than clarify today. In the years just prior to 11 September 2001, a new "American way of war" emerged to replace Cold War paradigms—those underlying, reflexive ways of thinking embedded in our doctrines. What emerged was a conceptual shift dubbed "Rapid Decisive Operations" (RDO). RDO rested on these pillars: An Air Force and Navy capable of controlling air, space, and sea domains from which to coerce enemies with a hail of precise air and naval missile power; increasingly more capable special operating forces to penetrate enemy territory and provide targets; and a new core capability called "information operations" (IO) to "influence, disrupt, corrupt or usurp adversarial human and automated decisionmaking, while protecting our own." In this IO domain, as in the others, the term most used in the late 1990s to describe the product of American technological superiority was not just superiority, but "dominance." RDO asserted that leveraging these asymmetric superiorities would not only conserve scarce ground forces and reduce casualties, but they would also achieve rapid and decisive results. As we saw versions of RDO applied in Kosovo in 2000, in Afghanistan in 2002, and in Iraq in 2003, it became clear to most professionals that this new paradigm oversimplified complexities then not well understood. In fact the chief failing of RDO was an utter lack of respect for the difficulty of what it set out to do: either to achieve *relevant* dominance in any sense, or to coerce any determined adversary to undertake any actions whatsoever. Even denying an adversary the ability to coerce or attack its neighbors has to be approached with humility today.

The IO component of this package has remained the most resistant to revision. Two prized and related tenets have proven especially intractable. The first of these tenets is that "the integrated employment of the core capabilities of electronic warfare, computer network operations, psychological operations, military deception, and operations security, in concert with specified supporting and related capabilities" is the best way to gain the maximum benefit of so-called IO core, supporting, and related capabilities. The other is that when these capabilities are thus integrated, an independent IO "logical line of operations" (LLO) can influence the behaviors of adversaries (and the populations that support them) with so-called "information effects" alone.

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PHOTO: Statue in Cherbourg-Octeville, unveiled by Napoleon III in 1858. Napoleon I once remarked that in war "the moral is to the physical as three to one." (Eric Pouhier, http://creativecommons.org/licenses/by-sa/2.5/)

For those who have been in the trenches, and working closely with the brigade combat teams most involved in the challenges of trying to "influence" the behaviors of real people under stress, these two tenets have proven amateurishly inadequate. While progress is being made on other fronts of "defense transformation," IO is stuck in an outmoded and naïve mind-set. Pentagon bureaucracy labors under the tyranny of a sluggish, lowest-common-denominator, top-down-bias in Joint doctrine. Engrained and enshrined habits of thought stand in the way of learning, unlearning, and relearning.

I have been an advocate, practitioner, and observer of IO since its birth, and I have witnessed and experienced its evolution. I understand both the timeless aspects of principles of action and the influence of new technologies. And I have a sense of what may lie ahead.

While progress is being made on other fronts of "defense transformation," IO is stuck in an outmoded and naïve mind-set.

Approaching a Conceptual Shift

Given the complexity of modern operating environments, foundational questions about IO have become problematic. Expected questions like "How can we better achieve information superiority and enhanced information effects?", "What are the 'best practices' in the field?", and "What is the best way to integrate core IO capabilities?" reveal inherent flaws in understanding how IO fits in a comprehensive theory of war. Attempts to answer such questions reveal symptoms of error, anomalies in theory, and tensions in logic, rather than solutions. The very term "IO" loses all descriptive and explanatory power when trying to make normative judgments from current doctrine and past understanding. In other words, it would be impossible to fix IO by working within the confines of the current understanding of IO. Asking these same questions again would not provide a fresh assessment.

To gain the most value from IO capabilities, we need to examine what roots underlie the symptoms, anomalies, and tensions evinced in the questions that current missions prompt:

- Has something enriched our understanding since the 1990s that could change current paradigms?
- Do current paradigms sufficiently describe and explain cause-and-effect relationships?
- Do current paradigms predict and control outcomes?
- Are current processes fundamentally relevant to current problems?

Answering these questions will entail examining paradigms for the following:

- Capabilities planning and collective employment.
- Actual purposes that capabilities serve in practice.
- Commanders' specific needs.
- What exactly we really do when we use IO.

Addressing these concerns requires determining exactly what "IO" denotes to experts in the professional literature and precisely what it means to practitioners in the field. Such an examination should lead to alternative paradigms that more accurately meet current and future needs. It should reveal how staff and command processes need to change, and what capabilities need to change and why.

The study undertaken to answer these questions resulted in a lengthy report that is yet unpublished. This article contains broad conclusions from the study, and it recommends specific changes. Forthcoming articles will entail more detailed recommendations.

Broad Conclusions

Current IO paradigms suit the main problem framed in the 1990s: how to rapidly and decisively take down a modern, well-defended regime also dependent on modern information-age technologies. Although current "core, supporting, and related capabilities of IO" will likely be central to achieving success in foreseeable 21st-century military missions, those capabilities require scrutiny to understand the most effective way to integrate them. The current overarching IO paradigm misframes the problems facing both operators and commanders today. They thus gain less from these capabilities—and the competencies required—than they could. A major implication is that it is time to give up the practice of IO as a separate LLO within our greater military operations.

Current conditions require organizing for, and developing greater competence in, the ever novel and complex operations the information age presents.

New ways of thinking are required to achieve the full benefit of IO capabilities. Current ways do not provide a relevant logic for IO. For instance, it will be more important to integrate words and deeds than to integrate the employment of IO capabilities into one LLO. It will also be more important to tailor planning approaches to the nature of the tool, and the causal logic that governs its function, than to assume that tools based on a linear logic and those based on a non-linear logic can both use the same planning approaches.

Logic and experience suggest it will be more important to pursue *three* ever-present, but practical, mission needs than to pursue (the grander, doctrinal, but over-ambitious) task of achieving "information superiority" to "influence, disrupt, corrupt," and so on. These needs are:

- Win the psychological contest with current and potential adversaries.
- Keep the trust and confidence of home and allied populations while gaining the confidence and support of the local one.
- Win the operational and strategic, cognitive and technical "information-age applications" contest with current or potential adversaries.

It will be necessary to integrate the capabilities for meeting these needs into a combined arms pursuit of multiple objectives (rather than, as aforementioned, pursuing one separate IO LLO).

Effective application already also requires expertise in very different disciplines. It will become even more important to reorganize IO capabilities into groupings for staff oversight that share common functional purposes, causal logic, and art- and science-based competencies. Leaving the collection of IO tools under the oversight of one staff officer has become an untenable option, and proper preparation and education will be increasingly difficult to achieve.

Once we re-think the way to employ the tools and competencies now in the IO kit bag, we need to educate, train, organize, and resource as if we were serious about their efficacy. The scope and scale of efforts to unify the message of words and deeds, and to win the cognitive and technical contest, need to be well organized and adequately resourced. They currently are not.

Environmental complexity has also forced the realization that current paradigms require radical restructuring rather than patchwork repair. The logic underlying these conclusions is summarized below.

Coherence of Words and Deeds

New paradigms have to account for necessary coherence between words and deeds. Many centuries ago, Sun Tzu emphasized the natural blending of the physical and moral domains in war. This wisdom was practiced by successful military commanders through the ages and later formally endorsed by both Napoleon Bonaparte and Carl von Clausewitz. Until recently, military theorists and practitioners agreed that an important defeat mechanism, not only in tactical engagements but in battles and campaigns as well, was to establish what was called "moral superiority." This psychological effect (on morale) prior to action would ideally

Statue of Sun Tzu in Yurihama, Tottori, Japan. Sun Tzu's *The Art of War* remains the masterpiece of holistic war theory.

Sun Tzu emphasized the natural blending of the physical and moral domains in war. This wisdom was… later formally endorsed by both Napoleon Bonaparte and Carl von Clausewitz.

assure a more complete and rapid success. Americans have bifurcated these domains to some degree in their reliance on technology (which carries no inherent moral content). Separating IO as a distinct LLO works against the naturally cross-reinforcing physical and psychological aspects of war.

At the same time, military culture evolved a bias toward "effects" in the physical dimension that was fostered by technologically evolved, simulated training environments. These gave little credit to non-physical, psychological battlefield influences. This growing bias fed the artificial bifurcation of the naturally conjoined physical and moral domains of war. The complex pathos of counterinsurgency has raised awareness of the moral domain again, but related distinctions are not well understood. For instance, so-called "kinetic" and "non-kinetic effects" and lethal and non-lethal actions present dissimilar logical categories. Non-kinetic effects can include electronic warfare and computer network operations that still operate in the physical domain. Lethal "effects" affect morale. Non-lethal ones may not. We need to return to the classical distinctions without losing our physical effectiveness.

Military actions may change physical facts, but they also change moral facts as perceptions, attitudes, and subsequent behaviors. Actions speak. They can demonstrate professional competence that engenders respect and fear, and everything we convey in words and images should resonate in harmony with our actions. Only when actions and communications resonate in harmony do words and images acquire a multiplier effect. Well thought-out actions remain the most convincing way to influence human behavior. Well-chosen, well-targeted words and images that build on such foundations can enhance that sphere of influence. Current doctrine, training approaches, and education should change to reinforce the natural fusion of war's physical and moral (psychological) domains. Our less bureaucratic adversaries already get it.

Highly Complex Missions

Modifying command and planning processes to focus on the very complex missions soldiers encounter today should become a priority. Useful application of some IO competencies must take the complexity of causal chains into account. The Army and the Marine Corps have been working on modifications to command processes for complex missions, and both the Army War College and the School of Advanced Military Studies have modified instruction to address them. But no one in authority has yet directed changes in doctrine and general practice based on the missions that prevail today. Doctrine still centers on missions with unambiguous and unitary objectives. Such missions involve distinct and hierarchical adversaries and allies within clear contextual boundaries. They present problems one can solve using a linear logic. Most missions from Grenada to Operation Iraqi Freedom (OIF) have required the pursuit of multiple parallel and sequential objectives involving shadowy and non-hierarchical adversaries. They have involved local informal alliances with varied partners within uncertain contextual boundaries that contain problems exhibiting complex, non-linear and interactive causal chains possessing no clear solution (e.g., the mission statement "Fix Ramadi").

This complexity is not limited to stability operations or counterinsurgencies. Such qualities were as present in OIF I and Operation Enduring Freedom (OEF) I as they have been in later rotations. Complexity and novelty conspire to make lessons learned in one mission potentially non-transferable to the next, and this intractability makes stabilizing doctrine difficult. A combination of increasing complexity and novelty demands modification of the normal linear Military Decision Making Process (MDMP), effects-based planning (EBP), and the Joint planning process. Consensus is gathering that complex missions require as much command attention to "problem formulation" decisions as to "solution implementation" decisions. Formulation is less based on deductive analysis than on inductive synthesis—akin to a doctor's diagnosis.

When the available doctrine cannot provide a logical template for coping with the complexity at hand, a commander must try to discover that logic in some disciplined and rigorous way. More importantly, complex missions also require turning inside the learning-adaptation cycle of other relevant actors in the mission context.

Extended operations naturally involve iterative cyclical processes of acting, sensing, deciding, and adapting. Even under the best circumstances, cognition in this interactive complexity drives operations to proceed on an imperfect understanding of inherent networks of causality. The commander's diagnosis must start with a hypothesis as a basis for initial action. Initial actions can then aim to improve the situation and enrich or clarify understanding. This approach is natural to all organic beings and societies. We only need to do this deliberately and more scientifically.

Information operations practitioners play a critical role in solving their command's ill-structured problems because it is their milieu. Their ill-structured challenges (composed of complex, non-linear, and interactive causal chains) involve deriving maximum value from IO capabilities. Linear planning processes that apply to fires and targeting involve predictable first-order effects in the physical domain. According to a well-understood linear logic, they create easily recognizable and measurable results. Such "normal" operations appropriately involve so-called "effects-based" planning. IO's psychological operations (PSYOP), military deception (MILDEC), public affairs (PA), and the like present difficulties that do not yield to an effects-based analysis. They operate purely in the moral domain according to a complex logic that has unpredictable second- and third-order ramifications. Predicting even their first-order effects is monumentally problematic, and that elusiveness may confound any attempt to sense and measure them.

Some IO missions, like operations security (OPSEC), information assurance (IA), counterintelligence (CI), and civil-military operations (CMO), operate across both the physical and moral domains. They produce predictable first-order effects according to the linear logic of physical laws, but their actual primary purpose is a product of second- and third-order effects attained by a far more complex logic. Easily recognizable and measurable first-order effects of each of these can be achieved within the logic of effects-based planning. But the further effects that actually produce the broader primary purposes of such missions result from complex causal chains. Thus the ends of OPSEC, IA, CI, and CMO are properly pursued by the same effort of learning and adaptation as applies to capabilities that operate purely in the moral domain.

Seeking desired outcomes amidst such complexity requires a disciplined, sustained, and purposeful iterative cyclical process: acting, sensing, deciding, and adapting. There will always be an imperfect understanding of inherent causal networks in such missions. Actions (or events) are designed as much to learn as to advance desired ends, and the aim is to turn inside the learning-adaptation cycle of other relevant actors.

Many known and unknown actors and events beyond the command's control constantly influence this milieu. It competes with a multiplicity of agents in the mission context and needs to learn how to inform and influence despite this intricacy. Maintaining coherence of words and deeds becomes paramount because the command's communicators compete in a realm of moral credibility. When the command sends discordant messages through its actions, or it fails to cross-reinforce words and deeds, its credibility is shaken. Lack of harmony between words and actions confuses audiences, and lack of consistency in messages further erodes credibility. And messages that are too general, rather than confined to the purpose of the command's mission, inhibit coherence.

Sensing relevant feedback is necessary, especially about the consequent behaviors of all relevant actors. Feedback makes it possible to make sound decisions about how to modify messages, actions, methods, approaches, modes of sensing, objectives, and even the framing of the problem. Learning how to learn about things the command is not organized to learn about is both difficult and essential. We neglect to test and improve the effectiveness of our ability to sense, thus we fail to learn how to learn. Such shortcomings affect our ability to improve our understanding of causal (influence) networks at the core of complex missions. Thus we impede progress toward mission goals.

This "turning inside the learning-adaptation cycle" logic is fundamental to getting the most value from IO capabilities.

We neglect to test and improve the effectiveness of our ability to sense, thus we fail to learn how to learn.

Practical and Realistic Purposes

A theory's purpose has to be practical. To be useful, a theoretical paradigm's purpose has to be achievable via a science-based (empirical) logic. The purpose inherent in current IO paradigms is too abstract, thus unmeasurable, and far too ambitious, thus unrealistic.

Joint doctrine's stated IO purpose (noted above) is too narrowly focused on adversaries. It also assumes that IO capabilities are not only necessary but sufficient for success. As such, this formulation recalls RDO because it does not address moral complexity like gaining the trust, confidence, and support of local populations. It thus underestimates adversarial decision-making where many things beyond the knowledge or control of IO operators will have influence.

In Army doctrine, IO's purpose is "to gain and maintain information superiority, a condition that allows commanders to seize, retain, and exploit the initiative." In actual practice, this abstraction is rarely the practical objective of IO LLO. The doctrinal purpose is far too idealistic and ambitious for the causal logic it suggests. Such broad dogmas encourage fuzzy thinking among IO professionals by using pseudo-scientific terms such as "information effects" (meaning the output of any or all IO capabilities) and "influence operations" (implying that IO capabilities are the only means commanders have to influence human behavior).

The real aim of commanders and their IO practitioners is to contribute to three broad purposes essential to the success of all highly complex missions:

- Win the psychological contest with current and potential adversaries.
- Keep the trust and confidence of home and allied populations while gaining the confidence and support of the local one.
- Win the operational and strategic, cognitive and technical "information-age applications" contest with current or potential adversaries.

Each of these necessary, realistic, and tangible aims relies on distinct, understandable logic and specific competencies. They accurately describe what savvy modern commanders actually do with IO by usefully categorizing by communities of common logic and purpose. They exhaust all uses of what is meant by "IO" in current professional usage. This ad hoc categorization facilitates the evolution of capabilities, competencies, and deeper expertise. While current formal IO categorization is a selective association of capabilities having to do with manipulation and processing of "information" (a common input to *all* military aims and functions), this approach categorizes more usefully by outputs. It focuses on intended results and the unique way they are achieved. This is a much more useful way to think about solving military operational problems in highly complex and dynamic mission environments.

Psychological war. In highly complex mission environments, winning the psychological contest is the main effort. Excellence in operations depends not only on using force to elicit change, but also on leveraging one's reputation for physical efficiency to influence decisions in the moral domain. Intimidating, demoralizing, mystifying, misleading, and surprising all aim to influence the physical domain. Such a holistic approach to real and potential adversaries uses psychological warfare, or "PSYWAR." PSYWAR was natural to Alexander, Hannibal, Caesar, Napoleon, and the other great captains up through the 20th century. A holistic approach continues to be essential to success. The less we can bring brute force to bear, the more we need to engage a psychological impact. The more our application of force becomes precise and discriminating, and the more rapidly our capabilities advance, the more artful we need to be in linking deeds, images, and words to leverage a psychological impact.

In practice today, deeds, images, and words are insufficiently linked due to segregated staff processes and doctrinal insistence on IO as a distinct LLO that often deploys empty threats and illusory rewards in pursuit of overly ambitious ends. Current Joint and Army IO doctrine tends to understate, and underrate, the difficulty of influencing desperate and creative people to do what they really don't want to do. We can never presume to understand the fears of others or what rewards will entice. Moreover, empty threats and illusionary rewards are increasingly difficult to mask in an increasingly transparent world.

Alexander fighting Persian king Darius III. From the Alexander Mosaic, Pompeii, Naples National Archaeological Museum. Alexander psychologically conditioned his enemies before battle.

Because we can never be sure how opponents will react to words and images, concrete actions designed to force choices inevitably follow. Therefore the PSYWAR paradigm encompasses both the art of conveying threats and rewards (PSYOPS) and the art of combining with actions intended to force choices. Helping the adversary understand the inevitability of choice-forcing actions is the function of PSYOPS.

Creating and exploiting a line of least expectation to the enemy's greatest vulnerability is central to the most economical and decisive path to success. The art of deceiving an adversary (more specifically mystifying, misleading, and surprising), is more than electronic deception, the aspect most emphasized by Joint IO doctrine. In the modern transparent environment, creating synergy between words and deeds (by harmonizing them) is essential to making the intended impression. Coordinating words and deeds resonates operationally, and understanding human behavior in the face of such synergy is as important as any other action or factor.

Past great captains wove the psychological and the physical together in actions against adversaries. Alexander, for example, always prepared for physical engagements by a thorough reconnaissance and psychological conditioning of his adversary. Genghis Khan and Tamerlane were both adept at following–up operations with psychological exploitation that extended implications to the furthest extent possible. Such intellectual rigor should become the habit of all American commanders at all levels.

Adopting a rigorously holistic approach to war will have profound implications for military education. Deep expertise in human psychology will be necessary. Army and Joint doctrine are not clear enough about the logic and theory that concerns the ever-present mental contest with implacable adversaries. While the moral dimension of war was well understood by Sun Tzu (writing in, roughly, 500 B.C.E.) and elaborated by military theorists since, we have lost touch with it. The modern literature of human psychology and decision-making is abundant, and this science is rapidly advancing. We only need to add information-age conditions to a holistically woven theory of war.

Military public relations. Keeping the trust and confidence of home and allied publics, while gaining the confidence and support of local populations, was crucial in the Peloponnesian War. Such considerations are classical, not new. The major difference today is the speed with which populations acquire information. Adversaries today can misinform, distort events, and prejudice relevant populations if they act quickly. Technology makes gaining public confidence and support far more immediate than ever before. It also used to be possible to think of affecting two separate populations—the home front and those in the battlespace. Such distinctions are no longer practical. "Military public relations" is the term that best describes the increasingly important and indivisible art of gaining and maintaining favorable relations with the public at home, in allied countries, and in the area of operations abroad.

Public opinion is the arbiter of success in all military operations. In this age, military public relations must increasingly become an integral part of operations. When people at home and in allied countries get the impression that their forces are ineffective and illegitimate, they will withdraw support. When people in the battlespace believe our enemy is winning, they will join them just to survive. When they believe our operations are illegitimate and against their interests, they will oppose us.

Before the first physical encounter with an indigenous population occurs, a moral reconnaissance of the human terrain should precede. A focused military public relations effort must first identify and assess potential allies and condition first impressions. And as situations unfold, the aim of military public relations among the local population should relate a coherent and credible narrative of success, progress, and positive consequences. Given the latent violence of military forces, this problematic work is increasingly essential for success.

Realistically, military forces have to prove worthy of the great risks these local populations are being asked to accept. Because of this, lessons from commercial advertising are not necessarily as directly applicable as some practitioners in the field believe. Soldiers and Marines are not selling a product. Our approach to winning approbation from the home front populations is overly centralized, too slow, inflexible, and outmoded. It would benefit from a "mission command" approach to de-centralized control. However, winning local allies, and gaining trust and confidence, is grass roots, bottom-up work, not susceptible to economies of scale. Absolute unity of effort is required for success in military public relations because these two related but separate challenges are so entwined today. You cannot say one thing to the media for broadcast back home and another thing to the village elders in the area of operations. Actions communicate better than words in both cases, and neither audience wants to be propagandized and manipulated. Such "influencing" is the common jaded perception resulting from PSYOP. Behaving professionally, and telling it straight, simply, and quickly works best.

Both halves of military public relations must contend with people apt to switch between positive and negative attitudes based on changing perceptions. (Human beings have difficulty remaining neutral.) The object is to keep the trust and confidence of the people who bear the burden of operations. Whether that burden is indirectly financial and moral, as at home, or a direct physical and moral imposition on those in the conflict, the majority need to be real allies in the fight. Failure is certain if they are not. When any mission aims to depose one government and facilitate the establishment of a new one, a radical and much more challenging shift in indigenous attitudes becomes necessary.

Being first with the truth is paramount in achieving such a shift. Minutes and hours matter whether that truth is a notable mission success, a failed enemy initiative, or bad news. The need for alacrity has outdated traditional mechanisms of vertical message control, which must be replaced. In other words, just as "mission command" relies on commanders' judgments to decide how to implement the intent of higher authorities, their discernment should likewise be trusted to filter and decide what should and could be said in public, as long as it pertains to their mission. Such trust streamlines clearance decisions, keeps spokespersons circumscribed, and is the only control mechanism that has a chance of meeting the speed required for success. It implies taking and maintaining the initiative to inform. It is the only way to guard the fragile credibility of any command on foreign soil.

The art of gaining and maintaining favorable relations with people in the area of operations also requires an interpersonal alliance with specific communities and their leaders. Such work depends on local social dynamics and cultural knowledge. We are neither organized nor educated for this work. Knowledgeable professionals should perform this work at brigade level and below where commanders have reorganized to perform it with available but undereducated people. Progress depends on accurate feedback of local perceptions, and specific knowledge about relationships, agendas, and interests. Our intelligence services are still primarily oriented toward learning about our adversaries and are ill-equipped for cultural expertise. Learning mechanisms in this dimension are stunted, and improvisation at this level has had mixed results.

Public law permits PSYOP organizations to conduct what I call military public relations, as long as it takes place abroad, even when it aims to influence allies in their homelands. Military leaders who are realists understand why this latitude is myopically problematic, even if "truth-based." Realistically, PSYOP should only be directed at command-designated adversaries. Oversight of PSYOP agents at every level is increasingly necessary to avoid damaging the military public relations effort.

Ironically, without the PSYOP capabilities now available to them, commanders would be short-handed in their military public relations efforts. These efforts increasingly require more competence

at lower and lower levels of command. Applicable career fields need to adapt to new demands and to expand capabilities within a broader, more realistic military public relations paradigm. And military public relations professionals require deep expertise relevant to spanning these challenges that comprise this necessarily unified field of competence.

NETWAR. Winning the strategic, operational, cognitive, and technical "information age applications" contest is becoming increasingly essential. Decisions have in the past depended on the commander's personal knowledge or on that immediately acquirable from those within voice contact. Since the first telegraph was set up in 1844, the electron has been harnessed to facilitate the transmission of critical information. We now live in a world of technology-enhanced networks of great variety and scope. Rapidly evolving technologies are increasing not only the speed of modern networks, but also their effectiveness, power, and adaptability. As aforementioned, the idea of being somehow able to dominate an "information domain" and achieve "information superiority" is now naïve. Instead, focusing on modern communications, information processing, automation, and other rapidly evolving network applications and how to advantage our own operations and disadvantage the various kinds of adversaries we may face is more realistic. But such efforts require deep expertise centered on the science of electro-physics, cyber-electronics, and complex cyber network behaviors. They also require knowledge of how these relate to military tactics, operations, and strategy—such expertise is now much too scarce. The art has yet to acquire a military name, although some use the term "information operations" in this stricter understanding of electro-physics- and cyber-electronics-centered sensemaking. To avoid confusion I will use the term "network warfare" or the abbreviation "NETWAR." Related to NETWAR are:

- Use of modern automation enhanced networks to make better decisions than the enemy in less time.
- Deployment of technology to construct "super-efficient" proactive and reactive strike networks better than the enemy can. In theory, and as information technologies advance, reactive strike networks will become the backbone of defenses. Such networks operate on the principle of achieving the greatest possible efficiency when the enemy has the initiative. The proactive kind operates on the principle of achieving the greatest possible effectiveness when one has the initiative.
- Denying this same potential to adversaries by destroying, disrupting, corrupting, and usurping the enemy's networks and the information gathered and processed within them. Such efforts must be holistically and closely coordinated with intelligence functions that depend on clandestinely harvesting valuable information from such networks.
- Assuring the speed, efficiency, and integrity of our own networks and information processing capabilities. An area that requires a holistic approach as well, it requires broadly assigned but specific responsibilities with increased leader awareness and education. New paradigms must also take a realistic and comprehensive approach to contesting our adversaries in the dark corners of the Internet. Old notions of controlling or dominating a "domain" are absolutely unrealistic.
- Denying terrorists and extremists the unfettered ability to post their websites, recruit new members, spread propaganda, and plan attacks across the world. The speed, ubiquity, and potential anonymity of Internet media make ideal communication channels for militant groups and terrorist organizations.
- Denying adversaries the ability to attack our Internet-accessible financial, transportation, power generation, and other information infrastructures. Army forces should play a part in defenses of our strategic infrastructures and in counteroffensives against adversaries who attack them.

NETWAR is a natural growth area, and clear thinking must precede a disciplined and scientifically layered approach to this paradigm's evolution.

Three powerful advantages. Current IO doctrine abstractly describes cause-and-effect relationships assuming a linear causal chain in the absence of historical experience and scientific proof.

The three broad purposes (psychological war, military public relations, and NETWAR) in the new paradigm above are inherent in every mission. Ample historical evidence, established military theory, and scientific study back this fact. Its conceptual formulation has three powerful advantages:

- It results in easily identifiable, tangible, and measurable mission tasks.
- It highlights the necessity but insufficiency of IO core, supporting, and related capabilities and

thus addresses the issue of essential synergies with capabilities outside the IO realm.

- It provides a more realistic path to deep expertise, more pertinent and clearly focused.

In the context of a specific mission, these purposes easily translate into tangible and measurable mission tasks.

However, while IO core, supporting, and related activities are normally necessary to achieve these broad purposes, they alone would rarely be sufficient. Sufficiency will result from a combined and coherent application of these purposes with capabilities outside the IO rubric. For instance, as powerful as words and images can be in the modern world, actions still speak louder. And as much as NETWAR contests will center on information technologies, sometimes sufficiency will depend on combined action with other capabilities outside that field.

Getting the most value from all IO core capabilities requires a far greater depth of expertise than is achievable by IO generalists within current IO paradigms. Even within the confines of pre-9/11 operational concepts such as RDO (for which IO was conceived to be an enabling tool), the required span of knowledge was challenging for any one person to acquire. Now, deep expertise is needed within these three communities (psychological war, military public relations, and NETWAR) of common logic and purpose, each of which applies a distinct area of competence.

Getting the most value from all IO core capabilities requires a far greater depth of expertise than is achievable by IO generalists within current IO paradigms.

Integration, Staff Oversight, and Necessary Organizational Changes

These essential IO capabilities and competencies require proper integration, the right staff oversight to optimize their value, a more useful approach to planning, and some adjustments in scope, scale, and focus.

Rationales for integration. Highly complex missions require the pursuit of multiple parallel and sequential objectives. Each objective requires influencing a different set of actors in ways relevant to the mission. Each resulting LLO will address problems exhibiting complex, non-linear, and interactive causal chains. The task force assigned the objective will integrate the appropriate arms and capabilities necessary and sufficient for success. Thus, rather than merely the integrated employment of IO core, supporting, and related capabilities in one LLO, the output must be integrated fully into the multiple lines of operations of the command.

Logic for staff oversight. What rationale should guide the oversight of this collection of capabilities? In one sense, elements of this collection naturally fit under staff sections that already integrate like-functions. Electronic warfare and computer network attack are weapons systems because these tools can be aimed at targets, just like artillery and attack aircraft, and they can temporarily suppress the functioning of equipment, networks, and command posts. This means they belong under the commander's agent for planning and coordinating the employment and effects of such weapons. Some aspects of operations security should return to G-3 oversight, but network security properly belongs to G-6 oversight. PA and PSYOP need to be coordinated within the staff on two axes.

The first axis is between the proper realm of PSYOP and the proper realm of Public Affairs. The logic presented in this report would further restrict the focus of PSYOP only to groups designated by the command as rivals, opponents, or the enemy. This distinction is no longer apparent, and as a command decision in every case, there has been counterproductive misapplication. Clearly it should not be a decision left to tradition or to the broad outlines of the law. The doctrinal mission of PSYOP must be to amplify for real and potential adversaries the implied messages of the unit's mission and actions. Meanwhile the mission focus of military public relations must be to speak for the command to all foreign and domestic audiences (because whatever is said to any audience has to be suitable for all). No open communications should disadvantage the campaigns of military public relations. And therefore PSYOP messages to the enemy must travel by means least likely to reach or influence non-enemy designated publics.

The other axis requiring close coordination is the one between words and deeds mentioned earlier. Neither the psychological contest with adversaries, nor the important effort to keep friends and gain allies,

will succeed unless the physical and moral domain efforts are unified. The current cleavage between these two can be overcome only when education and training reinforces the unity of the moral and physical domains. The command's planning staff should include officers with deeper expertise in the arts of both PSYWAR and military public relations than the normal command and staff course graduate has.

A start has been made in that direction, because the School of Advanced Military Studies (SAMS), the primary source of division and corps planners, has been directed to educate its students in the art of military deception, and the MILDEC staff responsibility is assigned to the G-3 (plans and operations). SAMS graduates need deeper expertise not only in MILDEC but also in the broader arts of PSYWAR and military public relations. The G-3 should be responsible for insuring that the actions of the command speak clearly toward the objectives of every LLO and toward the mission as a whole. The G-7 (public and command information) should be responsible for advising the G-3 and commander about the impact of actions on perceptions, and for amplifying and clarifying the intended messages of the command's actions in support of all of its LLOs.

The G-2 (intelligence) should support the G-7's work as much as the G-3's. Most reviews of IO have ignored the weakness in the G-2's ability to provide sensings useful to the G-7's work. The bulk of the G-2's capability is oriented toward discovering relevant physical facts. The G-7 gets very little G-2 support toward discovering relevant perceptions. This is a legacy of the Cold War that needs to be remedied.

Of the IO supporting capabilities, information assurance and combat camera now belong to the G-6 (information management and communications), physical security and physical attack belong to the G-3, and counterintelligence belongs to the G-2. Only combat camera needs a new source of staff oversight. By doctrine their historic mission has been to document on film the operations of the Army. The G-3 is responsible for assigning them to units for that purpose. In recent practice, enterprising IO and PSYOP officers have enlisted their help toward documenting the unit's version of events. The Army needs to officially assign these to the oversight of the G-7.

All three of the IO related activities (public affairs, defense support to public diplomacy, and civil-military operations) properly belong under G-7 oversight. Under the current staff arrangement there is no guarantee that the logic for deciding CMO projects reflects the aims of the "inform and influence" campaign unless the commander himself makes CMO project decisions. Civil-affairs units are also potent "inform and influence" agents because they must meet with local public officials in their work.

A more useful approach to planning. Planning for success in highly complex missions is different than planning for missions with unambiguous and unitary objectives, problems that can be solved using a linear logic. The ambiguous complex mission requires the commander to construct a theory of what something like "Fix Ramadi" might mean. A theory of cause and effect that leads him to that end is then necessary. This theory will inevitably be constructed along the following lines: "If I can get group A to behave in this way, and group B another specific way, and group C still another way…" and so on.

The important points are that each line of operations has to do with influencing group behavior (to change it) and that only when those behaviors change can progressive objectives be attained. A further point is that the path from the current to the future involves non-linear and interactive causal chains, shadowy and non-hierarchical adversaries, and local informal alliances with various kinds of partners within unclear contextual boundaries.

To change human behaviors under these conditions, words, images, and actions have to be very much in sync. That is, a separate IO line of operations, or an overall "effects" process, is less likely to work well. All relevant tools required to advance along each line of operations have to be integrated to maximize synergy. Finally, every such LLO has to be treated as a campaign within the larger campaign in the sense that desired outcomes require turning inside the learning-adaptation cycle of other relevant actors. This requirement means the command and staff processes of the headquarters have to be disciplined, sustained, and purposeful as an iterative cycle of acting, sensing, deciding, and adapting along multiple LLOs. There will always be an imperfect understanding of the inherent causal and influence networks, and actions or events will be designed as much to learn as to advance desired ends. Such deliberate adaptation is not the norm today.

Rationales for organizational adjustments. In future complex missions, the effects of relevant facts and perceptions are equally important. Staffs

and organizations essential to both realms should be equally well organized and manned. PSYOP, CMO, and PA organizations and G-7 staffs need adjustments. Until we do this, we are not serious about IO transformation.

The G-7 should be commensurately manned well enough to participate in normal principal staff planning and coordination. Also, future missions will require a baseline PSYOP, CMO, and PA capability in the conventional force down to brigade combat team and organic to the conventional side of the Army. Staffs sense, plan, coordinate, and supervise, but they are not executors.

Active PSYOP units are scarce and tend to deploy under the supervision of special operations units within Joint task forces. This situation will more than likely also be the normal practice in the future. Active PSYOP units should specialize to serve the special operations forces community exclusively and more expertly. Currently, the conventional force tends to be augmented with reserve component PSYOP units. These units cycle in and out of active operations at a different rhythm than the units they support. It would be better if they could synchronize with the supported unit's force generation life-cycle. What these units do for the conventional force is now vital because they fill a void. In some cases their work supports combat operations against the enemy by providing loudspeaker or leaflet support. But PSYOP units are more often used to inform and gain support of local communities. For the reasons already stated, this use of PSYOP detachments is dysfunctional as it can backfire when revealed.

What the conventional force really needs is an organic, sufficient military public relations capability down to the lowest level. This can be in the form of inexpensive equipment in the hands of troops with some baseline knowledge acquired in the education system and reinforced in training. Inexpensive loudspeaker systems for use by assigned interpreters, or with prerecorded messages in the local language, can be very useful, as would inexpensive multi-purpose digital cameras to record events. This dual-purpose equipment can be used in both the psychological contest with adversaries and also in the effort to inform and engage local populations. How to use them effectively is now a combat skill on an equal plane with a call for fire, and thus needs to be taught to NCOs and junior officers.

The conventional force also needs an organic baseline of military public relations detachments. Every brigade combat team commander requires a small specialized detachment to engage the ever-present media, to reinforce the local "inform and engage" effort where needed, to cultivate specific communities, and to arrange and organize the public relations events of the command. It would be far better that these be PA detachments working under the supervision of the command's public affairs officer, rather than reserve component PSYOP detachments under the supervision of the command's PSYOP officer.

Revision of Manuals

A paradigm shift, as Defense transformation intends, is required, and it can occur in two steps. The revision of Field Manual 3-13, *Information Operations*, could be the first step by explaining why IO core, supporting, and related capabilities have become more important, and by explaining the logic for getting the most value from them. It should address the logic of making progress when confronted with highly complex missions and tasks. It should also address the specific logics of PSYWAR, military public relations, and NETWAR. The final chapter should address staff organization and battle command issues.

The next step should be a revision of Joint Pub 3-13, *Information Operations*. Consideration should be given to producing two manuals. One could be called "Inform and Engage," the function the Army has assigned to the G-7 as modified here. The other manual would be a more developed version of what I have labeled NETWAR—the art of achieving, maintaining, and employing advantages over our adversaries in the application of modern communications, information processing, automation, and other rapidly evolving network applications. The one focuses on the modern twist to an ancient art in the moral domain, the other on a new and rapidly evolving art within the physical domain.

Whatever we do, we need to bear in mind what doctrines are and what they need to do. Doctrines are a profession's theories about how to perform its mission. When these theories become a shared second nature, they are called paradigms. In any scientific field, theory begins as hypothesis, and sound theory is a tested hypothesis. Sound theory is also

built one level at a time. No military doctrine can be as theoretically sound as the established theories of the physical sciences, but they ought to be built from the bottom up in a similarly logical way. Valid and useful doctrinal paradigms must, at minimum, be able to describe and explain observed phenomena, and must provide some basis for forecasting outcomes. This basis may be no more than accumulated experiential evidence (inductive logic). Some doctrinal paradigms, especially those closely related to the physical sciences, can reliably predict outcomes, and a rare few in the physical realm can even control the phenomena in question through a deliberate manipulation of its parameters.

Level of Theory	Corresponding Requirements of Theory
Describe	Concept Exhaustiveness
	Concept Mutual Exclusiveness
	Descriptive Scheme Supports Explanation
Explain	Description of System Causality
	Description of System Conditions
	Description of External Conditions
Predict	Forecast of External Conditions
	Forecast of System Conditions
	Forecast of System Based on Conditions
Control	Capability to Change System Conditions
	Capability to Change External Conditions
	Capability to Change System Laws

The schema above is a useful model for reflecting on the utility and reliability of our doctrinal paradigms. It also provides a basis for understanding the requirements of sequential layers. The first layer of a theory or paradigm is descriptive. Descriptions should be thorough (comprehensive), differentiate the described task from any other, and promote its explanation. The second, explanatory layer lays out the logic of systemic cause and effect and the impact of relevant internal and external conditions. The third level of theory development enables predictions of change in outcome depending on a changed input to the system, a different internal condition prevailing, or a new external factor impinging on the system. The fourth, control layer of theory forecasts changes in outcome based on changed parameters of the system, changed internal conditions impinging on the system, or changed system laws.

Current IO paradigms do not score well against this standard. They are "descriptive" only in the sense that IO has to do with information. What real phenomena do they explain, predict, or control? The doctrines of their sub-component parts fare far better, but beyond assertions, there appears to be no real common thread of theory to explain, predict, or control phenomena via integrated application of core capabilities.

This standard is a tough one, especially because this doctrine must address complex phenomena. For instance, describing how to target an enemy position is more easily done than describing how to defeat a well-dug-in enemy, and that is simpler than describing how to discourage the planting of bombs. But describing how to persuade a particular group within a local population to support your military mission is much more difficult. Such complexity increases with the numbers of links and nodes required in a system for accomplishing relevant tasks, but the causal relationships also become interactive rather than simply linear. More variations of internal and external conditions are possible. Explanation becomes commensurately more difficult than description, and prediction commensurately more difficult than explanation. But doctrine need not be perfect, it only needs to be useful, and it will be useful only if it is built one sound layer at a time, first to describe, then to explain and so on.

Doctrine also ought to be to provide a reliable basis for learning and adaptation. There are certain historical inevitabilities. No plan survives first contact with the real enemy, and no paradigm survives substantial progress and change. Even for ideas, an inexorable evolutionary change occurs. Fitness is a function of evolutionary adaptation. So it will be for IO and the "IO community." The current paradigm is not theoretically sound, and "IO" and its context need a foundational re-think. ***MR***

Irregular Warfare Information Operations: Understanding the Role of People, Capabilities, and Effects

Lieutenant Colonel Norman E. Emery, U.S. Army

In this type of war . . . the task is to destroy the effectiveness of the insurgents' efforts and his ability to use the population for his own ends.

—Air Force General Curtis E. Lemay[1]

OPERATION IRAQI FREEDOM (OIF) and Operation Enduring Freedom (OEF) do not qualify as conventional or unconventional warfare, but lie somewhere in between the two. Conventional U.S. military units in Iraq and Afghanistan find themselves engaged in operations best described as "special" rather than conventional or irregular. Labeled as irregular warfare, these conflicts actually have little resemblance to familiar doctrinal concepts. Once in theater, forces are required to engage using unfamiliar skills in political, economic, and social networking to complement military operations. We should not overlook the complexity of the enemy we face: a nexus of terrorism, insurgency, criminality, and negative transnational factors—a collective threat that does not always adhere to conventional ethics and rules.[2] Nor should we overlook the critical fact that all actors, state and non-state, are competing for the same objective: the people.

This set of circumstances requires information operations (IO) markedly different from those used in traditional conventional warfare. In irregular warfare, non-lethal capabilities have a more prominent and necessary role than in conventional warfare. Information operations directly influence the irregular warfare operational focus—the relevant populations. Current joint and Army IO doctrines do not adequately address the challenges long-term stability operations confront—irregular adversaries and asymmetric conflict. The doctrine still emphasizes the adversary decision-maker while minimizing the importance of the projection of public information to key non-adversarial audiences, especially foreign populations within the area of operations. These are critical tasks requiring greater expertise and an understanding of the irregular warfare information environment. To succeed in irregular warfare, IO officers need to understand how irregular warfare compares to conventional and counterinsurgency (COIN) warfare, the importance the population plays, how various adversaries project their information, and the importance for proficiency in cultural studies and studies of human behavior. Information operations planning must consider actions to support the tactical operation and the hierarchy of effects in the information environment that affect a unit's area of operations and influence.

We must reexamine IO officers' roles and education, proposed operations, and current IO doctrine, so that we do not continue to prepare Soldiers to fight today's war with yesterday's IO tactics, techniques, and procedures. An

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PHOTO: Iraqis crowd around U.S. Army Soldiers in a market in the Rashid District of Baghdad, Iraq, 24 September 2007. The Soldiers distributed Iraqi memorabilia and gathered information about the area. (U.S. Navy, Petty Officer 3d Class David Quillen)

examination of irregular warfare IO must not just impart vignettes, lessons learned, and professional opinions: it must consider how IO challenges in current combat zones necessitate adjustments and adaptations. The current complex war environment indisputably requires this change.

Irregular Warfare and Relevant Populations

The U.S. Department of Defense (DOD) has developed an irregular warfare joint operating concept to define and develop key elements and strategy for current and future conflicts that reside on the spectrum between conventional and unconventional warfare. The joint operating concept defines irregular warfare as "a violent struggle among state and non-state actors for legitmacy and influence over the relevant population."[3] Irregular warfare is a form of armed conflict, as well as a form of warfare encompassing insurgency, counterinsurgency, terrorism, and counter-terrorism. COIN, a spectrum of actions taken by a government to defeat insurgencies, is a component of irregular warfare, and therefore most COIN principles and models apply to irregular warfare, which is a different, but not a lesser form of conflict than conventional warfare.[4] While conventional warfare is direct military confrontation between states, irregular warfare focuses on the control and influence of populations, rather than the control of an adversary's forces or territory.[5] With irregular warfare, the problem is one of balancing operations against the enemy with operations to influence the population.

In conducting irregular warfare, one can neither ignore the enemy nor the population, and addressing them with equal energy and focus is difficult. The challenge in irregular warfare is that the adversary is not a single, easily characterized entity. In Iraq and Afghanistan, the insurgencies are not united monoliths; the "enemy" includes nationalists, protectionists, extremists, rejectionists, criminals, and terrorists—or any combination thereof. Separating the populace from the insurgents is a basic objective of COIN strategy. However, separating the terrorists from the insurgents in irregular warfare is another matter entirely.[6]

For simplicity's sake, the term anti-government forces here refers to all groups, regardless of motivation, collectively engaged in armed conflict against either coalition forces or a state's legitimate security forces or both. No single term can properly categorize disaggregated groups that share common goals but have competing objectives. This lack of congruity among objectives makes the collective groups vulnerable to effective IO that can drive a wedge between tenuous relationships and convenient partners.

The human terrain. Neither our enemies in irregular warfare nor the relevant population are monolithic. Lieutenant General Peter Chiarelli demonstrated an understanding of this fact when he commanded the 1st Cavalry Division in Baghdad in 2004. He emphasized the need for coordinating combat, stability, and information operations to create a stable and secure environment in Sadr City. Key to ensuring focused efforts was an understanding of anti-government forces' competition for the population and approaching the population as three distinct constituencies—opposed, unopposed, and undecided (figure 1).[7] Understanding these groups can help us better determine appropriate operations (e.g., lethal or non-lethal) and the messages to deliver.

Opposed audiences are active anti-government forces members or actively support the various enemy groups, and therefore are opposed to the state or ruling authority. The unopposed simply support the government. While the two sides struggle to dislodge each other, the true battleground is the constituency of the undecided, the "fence-sitters."[8] The undecided are generally waiting out progress and security concerns to determine who they will support; the victor will be the one who gets them off the fence. It becomes a zero-sum game for the state, the military, and the anti-government forces as they each compete for the bulk of the population that has yet to commit and can be swayed with the promise of hope or the threat of violence.[9]

The U.S. military should accept that instead of winning over these people, "victory" may consist

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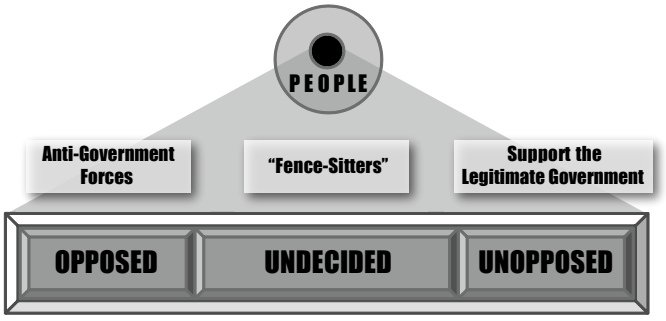

Figure 1. The three population constituencies in irregular warfare.

of simply not losing them to the enemy. A mantra the U.S. military often uses to describe its efforts to maintain the unopposed and sway the "fence-sitters" is "winning the hearts and minds." Too often a hearts-and-minds campaign is interpreted as making the population "like" us, but it really means reaching a population through emotive and cognitive means.[10] It is more than noble efforts in building infrastructure, holding elections, and creating jobs. Occupiers have to leverage existing social and political networks and build support within these networks to separate the insurgency from the population.[11]

Irregular warfare conflict model. Several conflict theory models have addressed the population's role in warfare, the most well-known being Prussian strategist Carl von Clausewitz's, which addresses warfare's trinity: military, government, and people. According to Clausewitz, military operations focus on an opposing state's armed forces as a means to control the government in the belief that the population will follow the lead of the government and accept the political outcome. An example would be Japan's surrender in World War II. The only military objective involving the population was minimizing civilian interference with operations. The trinitarian conflict model, a variation of Clausewitz's trinity and a principle of COIN theory, portrays non-state actors pursuing the Clausewitz paradigm in reverse order by confronting the people first to influence the government and avoid directly confronting the military.[12] The non-state actor has a greater chance of defeating the government if it gains the majority support of the population; if the government falls or compromises, that negates the non-state actor's need to attempt to decisively engage the military.[13]

Figure 2 depicts the Clausewitzian trinity adapted for irregular warfare and portrays the critical and common element to both the state's and insurgents' success: the people. This model, a variation of one developed by a retired Special Forces officer with significant COIN experience, portrays how the population is coveted by the state and its military to remain supportive of the legitimate government.[14] The mirrored model illustrates the military's and insurgents' preferred approach to engaging and winning the population rather than pursuing exclusive armed engagements. In a basic COIN model, the U.S. provides limited assistance, such as the current support in the Philippines.

The irregular warfare model in figure 2 depicts direct U.S involvement with a cooperative state, the population, and the insurgents and represents current operations in Iraq and Afghanistan. Essentially, because irregular warfare is a social-political crisis, this type of warfare requires more than a pure military solution.[15] The political and psychological aspects of irregular warfare are just as important as the physical actions. With the people the center of focus, information operations play a very significant role.

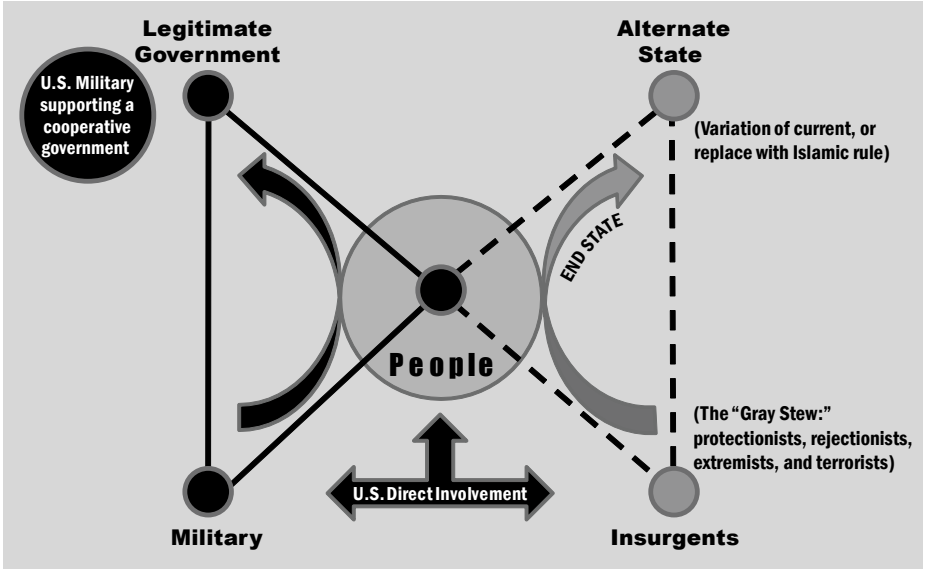

Figure 2. Clausewitz's "trinity" (military, government, people) adapted for irregular warfare with U.S. military direct involvement.

IO Challenges in Irregular Warfare

"Irregular warfare is about people, not platforms."[16]

The key military objective in irregular warfare—the relevant population—is also important for IO because this is our target audience. How an audience directly and indirectly reacts to messages affects how and when the United States achieves its campaign objectives. It is important to understand our primary audience, and remember how easy it is to lose focus by pursuing tomorrow's or reacting to yesterday's headlines, instead of sticking to a uniform message in support of a long-term strategy.

We should seek to shape the information environment for long-term success, and not bog ourselves down in point/counterpoint with adversaries striving for notoriety. Public affairs can counter specific adversary actions, but IO collectively should counter adversary strategies.[17] To achieve their goals, commanders and IO officers have to understand the information environment. The information environment is part of the operating environment and grounded in the physical domain. It consists of three dimensions: physical, informational, and cognitive.[18] All communication systems, including human information networks, reside in the physical dimension. The informational dimension "consists of the content and flow of information."[19] The cognitive dimension is the most important; in this realm, the decision-makers and target audiences think, perceive, visualize, and decide.[20] Simply put, if you were at a computer terminal, the computer is the physical dimension, the informational dimension is the data flowing through the computer, and viewing and processing that data is the cognitive dimension.

Know your audience. A shortcoming of IO doctrine is that its primary focus is on influencing critical adversarial decision-makers. This approach neglects a key target of irregular warfare: the relevant population not categorized as adversarial. The DOD IO Roadmap, produced 7 months after the invasion of Iraq and 25 months after entering Afghanistan, asserts that IO "must be refocused on adversary decision-making."[21] It fails to acknowledge a necessity, let alone a role for IO, in building relationships with civilian populations. It fails to grasp that effectively communicating the U.S. military's message to local, regional, and international populations is a means of helping to achieve tactical and operational military objectives.[22]

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By failing to understand the various audiences, we pursue or react to information or incidents with actions that seek to blanket all the audiences, making it costly and not fully effective. A common mistake in irregular warfare is to develop and disseminate a one-solution/message-for-all approach. It is inefficient to expend resources trying to convince an audience already committed to us. We should therefore avoid blanket messaging and instead, using minimal resources, make "maintenance" or reinforcement efforts toward the unopposed audiences, and put full effort toward the undecided audience. This is a strategy U.S. politicians employ during national elections. Thus, within one theme/message/information goal, there could be variations targeting adversary decision-makers as well as the three constituencies and their key non-adversarial leaders, such as tribal leaders, imams, and civic and political leaders.

In irregular warfare, not every possible audience or adversary can be persuaded to reconcile, and therefore, combat operations are required to destroy these groups. Information operations planning must consider not only actions to support the tactical operation, but also the hierarchy of effects in the information environment that affects a unit's operational area. A commander engaging physical, informational, and cognitive dimensions at the tactical level can gain exposure at national, regional, and international levels, and the impact in the cognitive dimension can have positive or negative effects on future operations for all commanders in theater. Joint doctrine dictates that at key points in time and space during conflict, the U.S. military should achieve and maintain information superiority, i.e., "the operational advantage derived from the ability to collect, process, and disseminate an uninterrupted flow of information while exploiting or denying an adversary's ability to do the same."[23] In irregular warfare,

the military, despite its technology, will rarely, if ever, gain information supremacy, while achieving information superiority may be temporary with unpredictable fluctuations. We cannot prevent an adversary from putting out a message or information. What we can and should do is to set conditions in the information environment with the key audiences (unopposed, opposed, undecided), so when opposing messages come out, they do not resonate.

Our adversaries' information goal is to be first. A rumor-centric society rewards this achievement. However, being the first with a message is not necessarily a victory, and being second is not necessarily a loss. Our goal should be to be first with the truth. Sometimes the enemy gets out the first word, but we can render it irrelevant by staying on message and by consistently repeating mutually supporting themes. In the end, our adversary has not necessarily gained success by delivering his message, nor has he dealt a defeat to us, just as our delivery of a message is not in itself a success. The issue is how the message resonates with target audiences. A global information environment in which most people believe the first story out tempts us to respond with a strategy of short engagement actions instead of adhering to enduring actions. Insurgencies have historically lasted 9 to 12 years, so one should not view irregular warfare IO efforts as short-term.

There are no well-codified rules in irregular warfare, but in competing for the population, terrorist and insurgency groups must at least abide by the rule of understanding their audience. The descent into barbarity (beheadings, deadly bombings) by such groups as Al-Qaeda in Iraq does not persuade the fence-sitters, and may cause the terrorists to lose the support of their constituents. Adversaries competing within a state (such as in Iraq, home to numerous Sunni insurgents, moderate and extremist) can lose audiences by bombarding the populace with conflicting messages. This is to the coalition's advantage. It is critical to develop and reinforce themes and messages that are consistent over time and coordinated with Iraqi and Afghan governments.

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Good news stories and U.S. popular support. Since information is central to the ability to shape battlefields, unity of effort and purpose in the information environment is vital.[24] While there must also be unity of information for indigenous and global audiences, if we concentrate on winning the local audience first, U.S. and global audiences will follow.[25] Information operations and public affairs officers at the operational level face a dilemma when they encounter military leaders who believe there is a need to push "good news" stories to counter the perception that only tragedy, hardship, and failure occur in combat zones. This tactic clearly aims at U.S. audiences, as Iraqis want proof and perception of physical security, not stories of school openings. Unfortunately, the "good news story" became a misguided sprint strategy, as some military leaders perhaps believed they had a responsibility to balance, if not counter, the output of U.S. news channels and newspapers to maintain U.S. domestic support. Any serving member knows of positive successes, but relating such stories can be a challenge, even with supportive media. In a 2006 article, journalist Lara Logan wrote of her frustration in getting relevant data from a general officer who wanted to share a "good news story" with her.[26] She tried to get the "good news" facts, but the officer could only assert such things as security was "better," great "progress" was being made. They had removed 100,000 cubic feet of trash from neighborhoods and operations were moving toward the goal of improving electricity for 3,000 homes.[27] Any leader who attempts to portray *national level* progress with the results of *tactical projects* would understandably receive a tepid response. Progress is the sum of achievements and atmospherics and is difficult to articulate; nevertheless, those operating in the combat environment can "sense" it, and it is a nuance of the information environment.

Our leaders must recognize that a single achievement can seem insignificant when taken out of the context of overall progress or buried amid the reporting of turmoil. As the military relies more

on commanders to convey progress, public affairs officers (PAOs) are doing far fewer visual and print interviews than might be expected. This shift in communication requires that leaders understand the trap of relaying empirical tactical progress to U.S. audiences who do not view the conflict in terms of city sectors. These leaders must better articulate progress so that it does not sound hollow. One method is to relate success that has or will occur over time using objective and empirical metrics. An example: "A new power plant opening in town X will provide reliable electricity to several hundred homes and create 70 new jobs in a region where men have resorted to insurgent activity to provide for their families. This will likely result in a vastly improved security situation in the coming months, and is a model of progress that is proving successful in this region."

The enemy has no rules. The non-state actor reigns supreme in the information environment. Information is the commodity with which it purchases cooperation, survivability, the perception of victory, and silence amongst supporters. The terrorist and insurgent do not have an IO doctrine. According to Jim McNieve, 1st IO Command (Land), non-state actors commonly use three broad methods in their information effects strategy:

- Projection of their message to various target audiences.
- Protection of vital information to enhance survivability and decision-making.
- Collection of information on their enemies.[28]

Our adversaries understand how to leverage the information environment, and the U.S. military should not abdicate that battlespace in pursuit of perpetual raids and kill-or-capture operations. Because the anti-government forces do not have military parity with the U.S., they do not seek success on the streets but in the information environment. They are not bound by the rules and ethics of responsibly releasing truthful information. The enemy has no rules. It can exaggerate claims, sensationalize events, omit facts, purposely mislead, and release information quickly without extensive staffing. In past decades, the way to reach audiences was the traditional media,[29] but now it is the Internet, where "the keyboard equals the Kalashnikov."[30] In irregular warfare, the gap between U.S. and adversary IO capabilities and use of the media and the Internet is much smaller than the gap between their respective military force capabilities. Islamic terrorist and insurgent groups we once considered ignorant and primitive are making effective use of cyberspace as a communication medium. This includes not just command and control via the Internet, which we expect in the 21st century, but the proliferation of messaging and propaganda directly connected to anti-government forces engagements in Iraq and Afghanistan, especially those causing or exploiting U.S. and allied casualties. Groups increasing video output include Iraq's predominately Sunni Arab insurgency, as well as the Taliban, who ironically opposed the use of cameras when they ruled Afghanistan.[31]

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Inevitably, other extremist groups will adopt this practice before long. Libyan firebrand Abu Laith al-Libi recently urged Islamic insurgents in Somalia, who have mostly ignored the medium, to begin using videos to foster awareness of their fight."[32] Information operations not only project messages, but also seek to deny and degrade the adversary's messages and deny his access to and effectiveness on the Internet. Countering these videos is of urgent importance, because research shows that "Internet chat rooms and forums are replacing mosques as venues for recruitment and radicalization."[33] This course of action requires the U.S. military to engage adversarial operations and propaganda directly and indirectly on the Internet.

Leveraging Information Engagement Capabilities

Information operations are a key COIN logical line of operation to win the war of ideas and destroy the will and legitimacy of the insurgency, and IO have the same, if not greater, relevance in irregular warfare.[34] We should seek solutions to irregular warfare's IO challenges by closely coordinating of efforts among the array of capabilities that

engage the public. We should set aside the current IO doctrine of "core," "related," and "supporting" capabilities. Such artificial categories create false barriers to planning, coordinating, and executing IO in irregular warfare. The IO core capabilities listed in current doctrine—"psychological operations" (PSYOP), "electronic warfare" (EW), "computer network operations" (CNO), "operations security" (OPSEC), and "deception"—have a logical but unnatural grouping, and constrain leaders' views of IO—by portraying it as *five* capabilities.

While an important guide, doctrine should be just a point of departure in the constantly evolving irregular warfare environment. Information operations is not a grouping of capabilities that comprise information. Information operations is a grouping of capabilities that affect information. More importantly, IO have a specific purpose and emphasis within an overall plan of action, operate under the same dynamics, and are inseparable from kinetic combat operations.[35] Information operations are more than just public affairs and PSYOP releases after a mission. Tactical commanders in Iraq and Afghanistan have had success with public information engagement as a main effort. Public information should consist of the coordinated, combined efforts of public affairs, PSYOP, civil affairs, combat camera, and face-to-face engagement. These capabilities are critical because irregular warfare requires a de-emphasis on information technology.

Holding your enemy close: making PA, PSYOP, and IO work. Unity of information effort is vital in irregular warfare. The two key specialties of PSYOP and public affairs (by doctrine, a "related" capability) support each other in today's combat environments. Still, they differ in coordination and execution. Many who work in public affairs think of PSYOP, and by extension IO, as nonfactual or even subterfuge—as manipulative and potentially mendacious marketing campaigns. Leaders can dilute the value of IO by thinking of it merely as an equivalent of public affairs or PSYOP. However, it is not heresy to group public affairs and PSYOP into a coordinated public information construct. Both use similar means (relaying a truthful message to specific audiences) to achieve different objectives (public affairs informs and PSYOP influences). A coordinated effort maximizes message effectiveness.

Brigade or regimental combat teams must develop the capability to influence and inform key target audiences at the local level. One commander even reported that his brigade's main targets were Iraqi and Arab media, "because they informed the population in my area."[36] We should influence and inform key target audiences through the local media or face-to-face means, because a national release by a theater PAO is insufficient to reach the fence-sitters and the uncommitted. In many ways, we do not use public affairs enough in irregular warfare foreign media operations. We have to reach a unit's tactical target audience population. Public affairs in support of irregular warfare should be more than just informing the U.S. public.

However, the joint definition of information operations, the integrated employment of capabilities "to influence, disrupt, corrupt, or usurp adversarial human and automated while protecting our own," limits public affairs application in irregular warfare.[37] The definition does not address non-adversarial populations, and does not include "inform," thereby blocking public affairs involvement, in coordination with IO, to reach specific foreign audiences. Commanders cannot succeed without public affairs and PSYOP capabilities to disseminate one-voice messages that engage tactical audiences, foreign media, and foreign populations, and coordinate counter-propaganda efforts. This issue is not one of public communication, but one of foreign communication.[38] Public affairs (inform using unclassified messaging) and PSYOP (influence using classified messaging) converge with respect to foreign media operations; PSYOP can extend the message's momentum as the public affairs-driven news cycle winds down.[39] Engaging foreign audiences with one capability without coordinating with the others increases the likelihood that PSYOP will encroach into public affairs's lane. Ironically, for public affairs to protect its contribution to the mission, it *must* work closely with PSYOP and IO planners.

Public affairs and PSYOP should cooperate in influence operations because the military has too few trained communicators to deal adequately with the overwhelming information demands of irregular warfare.[40] The PAO is an invaluable information battlespace advisor to the commander. He or she naturally understands the information environment as a whole. If the PAO excuses

himself from a process in which he is encouraged to participate, the commander will have to make information decisions without public affairs advice, even though the PAO is the best-qualified officer to give such advice. If public affairs is committed to success of the command, it will be part of the staff IO planning.

By doctrine, combat camera and face-to-face engagement are not IO, but they fall within information engagement capabilities. They therefore reinforce IO as part of operations, not a grouping of capabilities that various staffs "own." Face-to-face engagement is relevant and valuable at the tactical and operational level. It is a delivery platform to achieve information effects that inform, influence, or co-opt. Face-to-face engagement is a technique to engage influential leaders (municipal, national, civic, and tribal) before and after operations. Implementation by a commander instead of an IO officer does not mean it is not an IO function. Information operations strives to achieve specific results in the information and cognitive domains; the executing agents vary depending on which is the most appropriate. The combat camera capability supports IO by documenting events and operations to exploit successes, mitigate post-mission misperceptions, or counter accusations. We should view face-to-face engagement and combat camera as a valuable part of a strategy to integrate key public information elements and tools to achieve effects.

The final capability that plays a significant role in irregular warfare IO is civil-military operations, usually coordinated by civil affairs personnel.[41] Civil affairs is an IO-related capability and has a valuable role in achieving tactical cognitive effects. Information operations does more than just synchronize PSYOP with civil-military operations. Civil-military operations can effect social and political change in communities and regions through infrastructure work and social services, which have an important affect on target populations. Although some say "civil-military operations is not IO," they fail to recognize that civil-military operations is an important irregular warfare tool the commander can use to achieve informational and cognitive objectives in a target audience. While civil affairs can be altruistic, its function is to help the commander affect information environments and his operations. Purposeful philanthropy is for non-governmental organizations.

Public affairs, civil affairs, and PSYOP officers are effective in executing their respective functions in support of commander's guidance regardless of an IO officer's presence on staff. And the presence of an IO officer in centrally coordinated information operations does not necessarily subordinate those fields or erode their status with a commander. A public affairs officer can always say "no" to the recommendations of an IO officer. Centrally coordinated IO in irregular warfare does offer a method to eliminate seams between areas of expertise and capabilities. Ideally, the IO officer is in a position to have wide conceptual visibility. Such visibility enables an ability to coordinate and synchronize public affairs, civil affairs, PSYOP, face-to-face, and combat camera actions and information with respect to timing and effect within the area of operations.

The IO staff officer might suggest the timing or development of a PSYOP or public affairs product; recommend civil-military operations in support of non-lethal objectives to persuade non-military (tribal, religious, government) leaders; recommend combat camera document a certain operation; or suggest a face-to-face engagement before or after an operation. These suggestions or recommendations to the commander or chief of staff should diminish seams and achieve a greater effect. One of the IO officer's greater contributions in irregular warfare can be to eliminate seams and maximize effectiveness.

Understanding Effects in IW

"An effect is the power to bring about a result, i.e., influence."[42]

Measures of effectiveness are difficult to design and judge in a COIN campaign because, by nature, insurgencies are politically volatile and asymmetric.[43] This intractability prevails in irregular warfare for a number of reasons. The population's diversity and antagonisms, the presence of hidden enemies, the complexities of time and space, and the difficulty of observing and measuring the success of actions, or even knowing if they are successful, all contribute to eluding any meaningful gauge.

In irregular warfare, measuring effectiveness involves more than just simply observing imagined cause and effect relationships or having immediate or timely feedback. It requires subjective and abstract metrics. We often apply empirical data awkwardly to measure subjective effects, and the

resulting information can have little significance if we do not properly define success. We should remain cognizant of the difference between measuring effectiveness and measuring success, which may be quite different entities. Empirical data best measures the success of tasks over time or helps analyze trends.

The hierarchy of effects. Information operations officers must understand first-, second-, and third-order effects and apply this knowledge to tactical planning in irregular warfare. They can best advise the commander on assessing information environment risk to daily combat operations by addressing first-, second-, and third-order effects to identify potential collateral effects that result in positive or negative outcomes.[44] First-order effects are associated with the physical dimension of the information environment, while second- and third-order effects are associated with the information environment's information and cognitive dimensions. There are few clear lines of demarcation beyond third-order effects.[45] A first-order effect is a direct effect, a result of actions with no intervening effect or mechanism between the act and outcome. Such an effect can trigger additional outcomes, which are indirect (second- and third-order) effects.[46] Given the complex irregular warfare environment, the IO officer must not only take into account probable adversary reactions to friendly operations and events, but also their impact on the population and its actions and reactions in response to them. Some examples of IO that support or mitigate each level of effects follow.

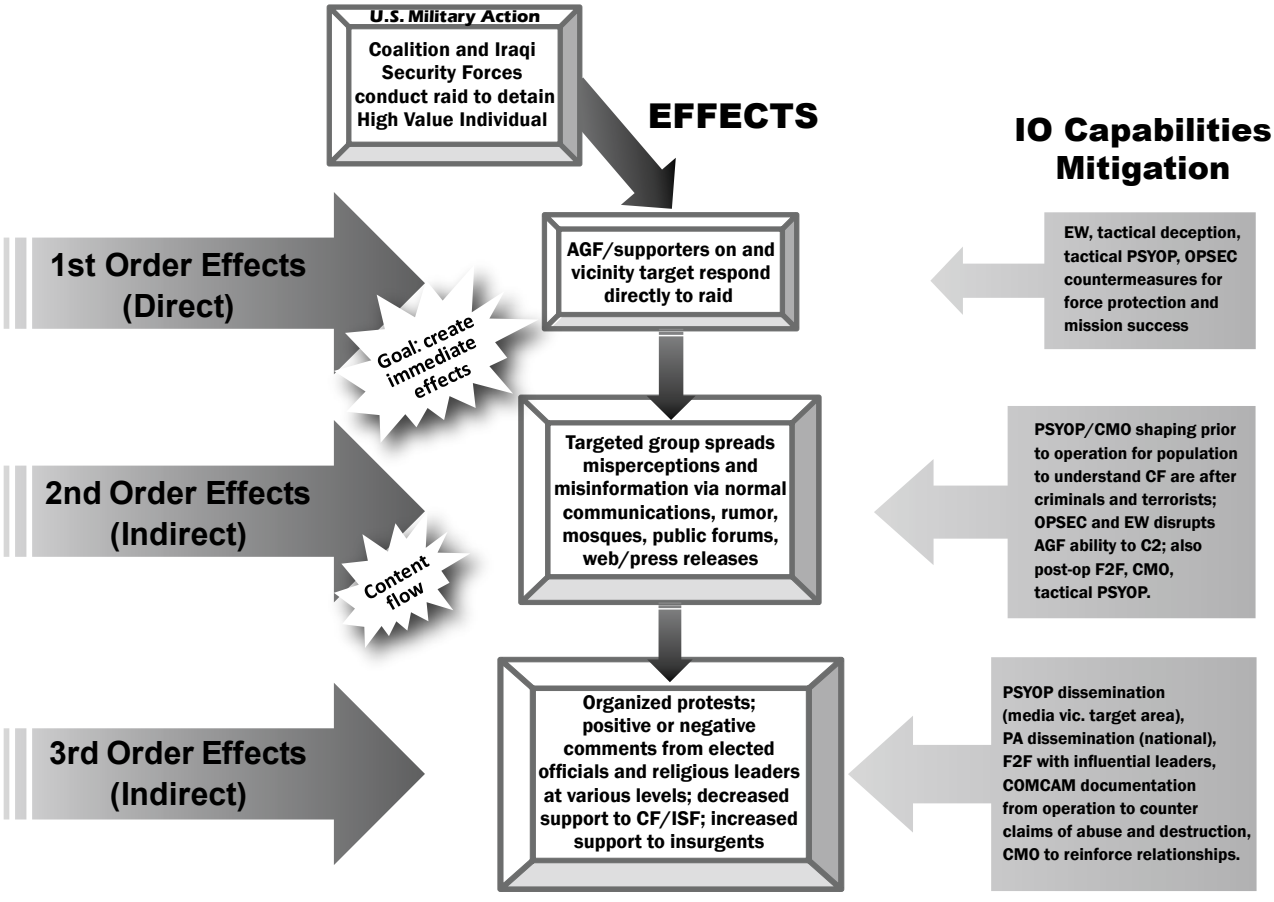
First-order effect—An immediate physical action or reaction. The IO goal is to enable force protection or unit success in executing the mission, limit adversary response, perhaps using EW and tactical PSYOP supported by tactical deception and stringent OPSEC countermeasures.

Second-order effect—The quality and integrity of information and information flow, EW, and tactical PSYOP actions limits disinformation resonating with the population. This could include a face-to-face meeting with an influential municipal or religious leader and coordinated civil-military operations to shape perceptions.

Third-order effect—Decision-making and perceptions. The IO officer coordinates various IO capabilities and other actions to support gaining the desired effect or preempting, countering, or mitigating an effect, using public affairs, PSYOP, and face-to-face to disseminate information.

Figure 3 depicts how IO officers can assess an operation's risk and effects by applying certain actions. The figure illustrates a raid to capture an individual wanted for suspected terrorism or violent crimes. Understanding first-, second-, and third-order effects is necessary for planning to achieve desired IO objectives. An IO objective should be effects-based, describing a condition or state in the information environment that IO elements will attempt to achieve.[47] The irregular warfare challenge is that intelligence systems cannot always detect the disposition of a population or the response of insurgent forces to coalition efforts. Such responses are not quantifiable by empirical data anyway. Therein lies the flaw: trying to produce effects as though doing so were a science. Assessing the situation requires atmospherics and information that sometimes is not personally gathered or observed by U.S. forces, and not easily or best expressed with numeric data. The reasons can be the permissiveness of the environment and the availability, access, and cooperation of citizens for polling.

Applying an effects-based process. Determining desired hierarchy of effects and supporting actions to achieve information objectives is just as important as evaluating the hierarchy of effects for planned tactical operations. There is a difference in planning operations with effects and planning effects-based operations, and this difference is important in irregular warfare. "Effects are linked to desired objectives, exert influence, cause a result, or trigger additional outcomes."[48] The IO officer can use an effects-based relationship model to validate effect objectives and military operations that support them. The model helps the IO officer verify if he is truly gauging and calculating effects rather than performance. An effects-based planning approach will address "the mind perceptions and cognitive dimensions of an adversary's reality, regardless of any physical or military inferiority or superiority."[49] Effects-based planning is very much relevant in irregular warfare because it is centered on the conditions of that reality necessary to achieve success, which may not exclusively relate to an adversary.[50] This is essential when political and social factors are inseparable from military



LEGEND: AGF, anti-government forces; C2, command and control; CF, coalition forces; CMO, civil-military operations; COMCAM, combat camera; EW, electronic warfare; F2F, face-to-face; ISF, Iraqi Security Forces; OPSEC, operations security; PA, public affairs; PSYOP, psychological operations.

Figure 3. Evaluating hierarchy of effects for planned tactical operation.

operations to achieve campaign objectives. And it requires IO officers to think beyond the initial operation or IO action and prepare to address collateral or unintended effects.

Figure 3 illustrated the hierarchy of effects applied to a tactical operation focused on the adversary. Figure 4 is an effects-based model adapted as an IO or effects planning tool; its original purpose was to show the relationship of objectives, effects, and targets.[51] The intent is to easily identify required IO-related actions to support achieving irregular warfare objectives. The example uses a scenario of a commander's intent to reduce IED network activity in order to decrease lethal attacks against the population and U.S. Forces. The identified objectives are "reduce anti-government forces Leader X network activity" and "Isolate anti-government forces Leader X from external support." This results in planners identifying initial targets and actions, both lethal and non-lethal, and the resulting direct and indirect effects. From the target, select likely first-, second-, then third-order effects, ending with the stated objective. This process is to ensure the target/action will likely produce the desired outcome. The IO officer evaluates if these likely effects (it is not possible to precisely predict or measure outcomes) are acceptable and makes necessary recommendations to the staff as needed. The IO officer is focused on getting the third-order effect to occur.

Information operations officers should have this breadth of understanding of operational risk and potential order of effects, although these are not exclusively IO functions to develop or gauge.

Conclusion

In the last seven years, prolonged U.S. engagements in Iraq and Afghanistan have had a major impact on military operations, as well as the role general forces play. The methods and processes proposed here are not definitive, but may expand

Objective	3rd Order Effect (indirect) INFORMATION	2nd Order Effect (indirect) SYSTEM	1st Order Effect (direct) PHYSICAL	Targets
Reduce AGF Leader X's network activity	AGF Leader X decides to temporarily reduce ops to determine who/how provided CF/GOI info	Information on raid relayed to Leader X	Raid to detain HPT #1 and 7	HPT #1 and 7
Reduce AGF Leader X's network activity	Network members are paranoid and distrustful of each other	Network members learn detained network member gave info to detain HPT #7	Conduct rumor campaign	AGF Leader X, region population
Isolate AGF Leader X from external support	Leader X supporters in government do not publicly condemn detention of HPT #7	Public informed of crimes of HPT #7 and relation to Leader X	Press release on detention of HPT #7	AGF Leader X, region population
Isolate AGF Leader X from external support	Population vicinity town Z more reluctant to provide network smuggling support	Target audience learns information on capture and cooperation of detainees	Handbills in town Z , local or satellite TV commercial	Local population, network members

LEGEND: AGF, anti-government forces; CF, coalition forces; GOI, government of Iraq; HPT, high priority targets

Figure 4. Effect-based relationship model adapted for IO planning in irregular warfare. (Relationship of objectives, effects, and targets)

IO officer knowledge and thought processes for irregular warfare. My purpose is to share ideas and concepts with my peers, the IO proponent, and others responsible for training, educating, and preparing IO officers for OIF and OEF. Despite my ten years of Army and joint IO experience at tactical, operational, and theater levels, I continue to experience hard and sharp learning curves with each successive deployment.

An examination of warfare and IO doctrine is not only required of senior leaders, but also of those responsible for executing and coordinating operations in irregular warfare, and in the military education and training system responsible for preparing those individuals and forces.[52] In irregular warfare, the role of IO is significantly greater than during major combat operations. The people among the populations and the roles they play in society, government, the military, and the insurgency are the foremost focus of IO methods in support of irregular warfare.

If all one has is a hammer, then the entire world begins to look like nails.[53] This observation also applies to what commanders and staffs believe IO represents. However, IO are more than just public affairs and PSYOP releases after a mission. Although the population's role in irregular warfare requires emphasis on IO public engagement, an enemy we once underestimated is demonstrating a more effective use of cyberspace as an internal and external communication tool, and this requires special "technical" IO attention and efforts. Moreover, at the tactical and theater levels in Afghanistan and Iraq, it is time for public affairs and PSYOP officers to define how they will cooperate and coordinate in support of the commander's information objectives, rather than continue to itemize the reasons they stay at arm's length. Continued friction only serves the adversary. We cannot prevent our adversaries from disseminating their messages, but we can affect how that message resonates with our target audiences.

Words alone will not have a tipping-point effect. Information operations is not a golden arrow or a silver bullet to counter and destroy enemy propaganda and quickly cause whole populations to change disposition. Doing so requires coordinated military operations. Information operations officers should be able to advise their commanders of the risks and potential direct, indirect, and collateral effects that physical domain operations will have on the information environment. In measuring the effects of operations, let us not make the process to evaluate them too hard.

Although force levels may decrease during the next few years, our commitment to victory will not. Our forces in Iraq and Afghanistan must understand and prepare for changing threat environments and their impact on the irregular warfare environment as our adversaries adapt and other opportunists surface when rivals are defeated. A rule to heed: do not underestimate these challenges just because you understood the information and threat environment during your last deployment. ***MR***

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GEORGIA: The War Russia Lost

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The views expressed here do not represent those of the U.S. Army, Defense Department, or the U.S. Government.

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PHOTO: A statue of Soviet dictator Joseph Stalin is reflected in a bullet-ridden window in central Gori, Georgia, 19 August 2008. A small column of Russian tanks and armored vehicles left the strategic Georgian city of Gori, the first sign of a Russian pullback of troops from Georgia after a cease-fire intended to end fighting that reignited Cold War tensions. (AP Photo, Mikhail Metzel)

THE RUSSO-GEORGIAN WAR that broke out in August 2008 already shows all the earmarks of being a watershed event in world affairs. It is already reshaping policies and governmental calculations throughout the world. The most striking aspect of this war is Russia's unrelenting, aggressive unilateralism. By early September 2008, less than a month since the war began, Russia had refused to abide by its own cease-fire, expanded its occupation zone, looted Georgian territories under its control, demanded an arms embargo and regime change in Georgia, unilaterally recognized South Ossetia and Abkhazia, and issued repeated ultimatums to America to not rearm Georgia and to stop providing humanitarian assistance. Russia has also threatened Poland with nuclear strikes, told America it may suspend its cooperation with regard to Iranian nuclear nonproliferation and preventing Iran's purchase of air defense missiles, announced its intention to complete Iran's Bushehr nuclear reactor, and threatened Turkey with retaliation for keeping the Bosphorus Straits open for humanitarian relief shipments.

In addition, on 31 August President Dmitri Medvedev announced that Russia would fight American unipolarity, adopt a Nazi-like doctrine that states Moscow has the right to protect ethnic Russians as well as those to whom it grants citizenship beyond its borders, and claim a Russian sphere of influence encompassing the Commonwealth of Independent States (CIS) and other nations beyond the CIS with which it has "privileged relations."[1] Thus, Moscow seeks to challenge the entire structure of contemporary international relations. These stated political principles are hallmarks of a regime that is out of control, consumed by its own arrogance and swagger, and a clear and present danger to all of its neighbors and interlocutors.

Yet, while Russia won the war in tactical and operational terms, it is fast becoming clear to Moscow—as it should have been before the war—that Russia's strategic losses are mounting and will in time eclipse the gains Russia obtained through the use of force. In spite of operations with an estimated cost of $2.5 million a day, Russian leaders profess lack of concern about the economic impact of the Georgian campaign.[2] Foreign Minister Sergei Lavrov has dismissed concerns about possible sanctions against Russia.[3] Prime Minister Vladmir Putin, unlike President Medvedev, believes that the potential cost to Russia will be negligible and that the financial crisis currently afflicting Russia has little or nothing to do with Georgia.[4] Putin is unwilling to accept the fact that the war in Georgia and the ensuing international anger

with Russia are in any way connected to the Russian stock market crash or the ruble's weakness.[5] Such strategic unrealism imitates that of the Georgian leadership.[6] Russia also does not seem upset that it has now lost any possibility of joining the World Trade Organization and thus millions of dollars in revenues and investments.[7] Yet, closer examination suggests that here again Putin's, President Medvedev's, and their officials' confidence is misplaced.

There is no doubt Russia's drastic, unilateral military operations have triggered these negative economic events. A limited Russian peace enforcement operation (to use U.S. terminology) to expel Georgian forces from South Ossetia would have sufficiently proven Russia's point, thwarted Georgian policy, discredited the Saakashvili regime, and provoked little response. Instead, blinded with a desire to show the world who is boss in the CIS, to humiliate and overthrow Georgian President Mikheil Saakashvili, and to demonstrate that Russia is still a great power not to be trifled with, Putin went for broke. His personal hatred for Saakashvili and his revanchist and resentful feelings against America are the underlying causes of the invasion—and prove who is the real power behind the throne. There is abundant evidence that the war was a Putin-led provocation from start to finish, designed to achieve the geopolitical and personal goals listed above, and perhaps inspired by a need to show President Medvedev that he does not actually control Russia and cannot dislodge members of the security services from power.[8] If nothing else, the size, scope, and speed of Moscow's combined arms response and continuing occupation and Russification of Georgian territories in defiance of its own cease-fire suggest as much.[9] But now the costs of such operations are beginning to make themselves felt.

By early September 2008, the Russian stock market had fallen considerably, foreign investment was fleeing the country, the EU halted its work on a new partnership agreement with Russia, and leading EU members raised the idea of sanctions against Russia. In return, Russia threatened to cut energy shipments to its customers.[10] It even became necessary for Russia to intervene in its markets to rescue the falling value of the ruble. While much of this economic weakness was and is attributable to a global recession and to the economic pathologies of Russian governance, the situation in Georgia—along with the breakdown of ties with the EU and America—contributes significantly to investors' fears about Russia's future economic health. The geopolitical costs of the Georgian adventure are beginning to come in, and even in their early stages, they amount to substantially negative results for Russia. To compound Russia's problems, America, like the EU, is considering sanctions against Russia, has withdrawn the nuclear treaty with Russia that would have earned Russia hundreds of millions of dollars, announced a reassessment of its Russian policy, and is considering suspending arms control talks.[11]

AP Photo, Irakli Gedenidze

Georgian President Mikhail Saakashvili chairs a government session in Tbilisi, Georgia, 12 September 2008.

The consequences of that last action, if it occurs, are immense. If both sides do not reaffirm their intention to extend the Strategic Arms Reduction Treaty (START) by December 2008, it will expire in 2009, leaving both sides without any means of verifying each other's strategic programs. Given the current impasses over treaty extension and missile defense, this could mean no reductions in strategic arms before the Nonproliferation Treaty Review conference in 2010. A failure now to extend START would all but doom the 2010 conference and

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DOD, LCDR John Gay

Banners hung from buildings and walls in Tbilisi, Georgia, protest Russian military occupation of Georgia, 31 August 2008.

possibly open the door to proliferation in Iran and North Korea, an event that would benefit no one and further exacerbate global and regional tensions even in regions unconnected with Georgia. Meanwhile, NATO is beginning to rethink its members' low levels of defense spending and consider committing more resources to territorial defense.[12]

Meanwhile, Prime Minister Putin has threatened to suspend Russia's minimal and grudging cooperation with America over Iran to sell S-300 air defense missiles to Tehran if Washington ever acts against Moscow.[13] Iranian and Chinese missile capabilities have already so alarmed Russia that it wants to either walk out of the 1989 Intermediate Range Nuclear Forces (INF) Treaty or globalize it, leaving Moscow to gain nothing from a suspension of contacts with Washington, other than heightened threats against it by its supposed allies.[14] A Russian withdrawal from the INF treaty, while perfectly legal, is utterly counterproductive, because it will stimulate missile production in Europe, Asia, and the Middle East at a pace that Russia cannot match.

A purely Machiavellian American administration might actually take up Putin's threat, leaving him alone among these threatening neighbors as the United States builds missile defenses in Europe and the Middle East to block the Iranian threat Russia permitted. We can see Moscow's lack of strategic compass in this crisis in its swaggering ultimatum to Washington, that it either support Moscow and ditch Georgia or suffer the consequences.[15] This misplaced swagger will surely be to Russia's detriment. No U.S. government will accept such ultimatums, and they are beyond Russia's capability to enforce without serious costs.

Other notable political costs to Russia are also already visible. The CIS has proven to be worse than useless in reaching a position of support for or opposition to the war. Ostensibly indicating disapproval, The CIS remained silent about the war and Russia's efforts to rearrange Georgia's integrity and sovereignty. Belarus only joined the chorus of approval for the war after Moscow warned Minsk that it did not appreciate such silence. However, Belarus had previously indicated its interest in improving ties with Europe and America by releasing dissidents from prison.[16] In addition, Kazakhstan called for negotiations and refused to fully support the operation, thus lending cover to Kyrgyzstan, which was clearly unhappy about the

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forcible truncation of Georgia's sovereignty in the name of a Russian doctrine of extra-territoriality to justify intervention on behalf of Russian minorities. Indeed, its government waited for over a month before endorsing Russia's campaign.[17] The Shanghai Cooperation Organization (SCO) has refused to support Moscow's actions to dismember Georgia and recognize South Ossetia and Abkhazia. China, too, has intentionally remained silent, indicating its ambivalence, to say the least, about Russia's actions. Obviously, all its actions to date have only served to isolate Russia, especially on the issue of claiming a sphere of influence over the CIS after the SCO demonstrated that it did not accept such a claim.

The SCO's refusal to ratify Moscow's war and support the dismemberment of Georgia indicates the SCO is not the rubber stamp Moscow wants it to be, and shows the limits of Chinese support for Russia.[18] Although Beijing has not opposed holding the winter Olympics in Sochi in 2014 and thus has tacitly blessed the military action, no Chinese government can openly support a great power's independent decision to take over disputed provinces and then put its military bases there. The parallels to Taiwan and to the mounting unrest we have just seen in Tibet and Xinjiang are all too strong of reminders to China of the ultimate vulnerability of its claims to sovereignty over those provinces. President Hu Jintao probably resented Moscow's timing with Georgia, raining as it did on his Olympic parade by competing with it for news coverage, and dimming the global spotlight he had hoped would have been focused solely on China. The SCO's carefully hedged posture on this war and the engineered secession of Abkhazia and South Ossetia suggests that China has more influence in the SCO than Moscow would like it to have. Central Asian governments will not support a doctrine that diminishes their sovereignty for Moscow's benefit, despite Russian efforts to bribe states like Tajikistan.[19] Russian officials' oft-displayed contempt for the sovereignty of these and all the other CIS and post-Soviet states, including those in Eastern Europe, has long been a matter of public record, and while the Central Asian states depend on Russia, they cannot support so public a diminution of their own legitimacy and authority.[20]

At the same time, Russia's ongoing military operations suggest further costs and future liabilities that Moscow should have foreseen. One set of costs is external, pertaining mainly to Russian relations with the CIS, and the other is internal. Externally, it is clear that Russia's unilateral effort to diminish Georgia's sovereignty and integrity by force is creating a condition that allows Georgia to regard these provinces as the equivalent of Alsace-Lorraine in Franco-German wars, that is, as a perpetual site of conflicting claims and revenge. Moreover, the SCO, the EU, and others will not recognize Russia's forceful redrawing of Europe's map on the basis of phony charges and provocation. This produces a situation in which Russia cannot translate its power into legitimate authority. In other words, Russia is sowing the seeds for another future conflict in the Caucasus, quite possibly a violent one. Furthermore, international agencies are rushing to rebuild Georgia. America is providing it with $1 billion in aid, the IMF is lending it $750 million, and the executive board of the Asian Development Bank has voted unanimously to lend Georgia money for reconstruction.[21] All these actions signify disapproval of Russian policy and a determination to resist any efforts to destroy Georgia's economy and capacity for independent self-government, an objective that may well have figured prominently in Russian plans.

The North Caucasus remains aflame. Disturbing signs of breakdown of public authority abound and even police officers have reportedly fled from terrorist attacks there. Indeed, the ongoing war in the North Caucasus and Moscow's visible failure to terminate it has caused the leading American analyst of those wars, Gordon Hahn, to call Russia a failing state.[22] The crisis in Chechnya and the North Caucasus required 250,000 troops to occupy those areas as of 2006, and Russians question Moscow's own rule in these provinces.[23]

Once again, Russia has regressed to a neo-Tsarist autocracy, with elements of both the Soviet and Fascist systems and an inherent tendency to military adventurism. For the fourth time since 1993, Russia has unilaterally chosen to use *force majeure* over and above that necessary to resolve internal succession struggles and revise post-1991 territorial agreements.

Europe can no longer assume a peaceful Russia. Russia's national security policy presupposes conflict with NATO and sees the United States as its primary enemy—a designation Russia will soon enshrine in new defense doctrine. Its basic nuclear policy rests on the corollary that for Moscow to be secure, no other European capital can be secure. Russia wants to return to the Cold War politics of intimidation with tactical nuclear weapons, short-range, inter-continental, and submarine-launched ballistic missiles.

Perhaps the greatest or longest lasting external political cost to Russia from this adventure is the shattering of European complacency about Moscow. Even the pro-Russian German Foreign Minister Frank-Walter Steinmeier has called this war a turning point.[24] The realization that Russia will not honor its own political commitments such as cease-fire agreements will only harden European opinion against Russia. The EU and NATO may be divided on some issues, and Russia may try to use its considerable abilities to bribe, intimidate, blackmail, and otherwise subvert European unity, but a military-political-economic reaction against Russia is already taking shape.

That reaction certainly goes beyond sanctions. Its most visible element is the U.S.-Polish agreement on missile defense signed days after the war began and directly as a result of Russia's demonstration of its offensive policies. That treaty not only secures the introduction of U.S. missile defenses in Poland, it actually places U.S. troops there to defend Patriot air defense batteries. Clearly intended against Russian threats, it provides a mutual security guarantee above and beyond the current NATO agreements, and can be invoked even before action from NATO occurs. This threatens to trump Moscow's ability to intimidate Europe with Russian nuclear weapons and may generate a continent-wide arms race that could be economically ruinous to Russia. Worse yet, the Ukrainian government announced its readiness to associate itself with Western missile defenses and early warning systems, suggesting another very dangerous situation for Moscow, especially if Ukraine does join NATO.[25]

The issue of missile defenses had proven, even before the outbreak of this war, to be one that could effectively reorder Europe's security agenda because of the threats Moscow made against Poland and the Czech Republic previous to the Polish-American agreement. Russia's nuclear bluster and belligerently anti-American policy caused the Pentagon to respond even before the war to ensure the quality and responsiveness of America's nuclear deterrents.[26] Indeed, the Navy is considering deploying Aegis warship patrols in the Baltic or Black Seas to protect missile defense sites in Poland and the Czech Republic from being the first targets in a phased enemy attack. However, such a naval deployment would be a violation of the Montreux Convention of 1936, and even Ankara would never allow it in peacetime, let alone Moscow.[27] Indeed, Secretary of Defense Robert Gates now appears to be calling for an increase in missile defenses because of the Russian strategic nuclear force. Certainly, this is how Russia interprets his remarks, using them, as it does, to substantiate its charge that the United States is hostile towards Russia.[28] Now, in the aftermath of the war with Georgia, the U.S. government is reassessing its policies towards Russia, and many military leaders are warning about Russian military capabilities.[29]

What is particularly dangerous about this trend is that Russia's invasion of Georgia, the resulting weak Western response, and the rising tone of Russian assertiveness and willingness to accept international isolation, could mean a return to a period of heightened tension in Europe, although not necessarily another Cold War. Putin's and Medvedev's boasts that they are not afraid of another

Russia wants to return to the Cold War politics of intimidation with tactical nuclear weapons, short-range, inter-continental, and submarine-launched ballistic missiles.

Cold War do not stand up to scrutiny because they know full well that Moscow cannot accept that outcome or sustain it. Moreover, if an arms race does break out across Eurasia, it is likely to be a nuclear arms race. Due to Russian conventional forces' continuing failure to modernize, and the failure of its defense industry to provide weapons in sufficient quantity and quality, Moscow has fewer viable actions and may once again rely upon possible first-strike nuclear attacks.[30] But even this desperate option has problems. Russia cannot produce enough nuclear weapons by 2015 to obtain anything more than a state of minimum deterrence. Thus, in spite of all the boasting about long-range bomber patrols, claiming territory in the Arctic, buzzing American ships, and possibly basing long-range nuclear-capable bombers in Cuba, it seems that Russian military options are merely empty rhetoric designed for domestic consumption. In fact, Russia's defense industry cannot meet the demand for sustained, quality production of high-precision conventional weapons. Combine that with an army which refuses to become truly professional and (except for some niche specialties) cannot conduct high-tech operations and use modern equipment for optimal effects, and the result is an army not suited to contemporary large-scale operations or to counterinsurgency. The only form of the latter that seems to work for Moscow is the traditional tactic of "making a desert and calling it peace" while finding a Quisling- or Petain-like leader who will accept Russian rule and divide local elites.[31] Consequently, any arms race with Russia is more likely to involve nuclear arsenals rather than conventional arms.

AP Photo, Natalia Kolesnikova

Russian President Dmitry Medvedev, left, listens to First Deputy Prime Minister Igor Shuvalov at a meeting with business leaders in Moscow, 15 September 2008. Medvedev warned that any sanctions imposed on Russia over the war in Georgia would backfire.

Yet, Moscow may well try to restore its conventional capabilities if it believes them necessary. There is good reason to believe that this war has mortally wounded the Conventional Forces in Europe (CFE) Treaty. Russia unilaterally suspended its participation in this treaty in 2007 at least in part to free itself for action in the Caucasus. We now see the consequences of that rash decision. However, in this atmosphere of heightened threats and ever more belligerent rhetoric, we cannot rule out the possibility of a conventional arms race due to this war, at least in Eastern Europe.

Moscow's consistently belligerent but possibly empty responses to all these challenges, such as its formal announcement of a doctrine of extra-territoriality and its demand for an undefined sphere of influence, suggest that it was unprepared to act on its provocations. Initially confronted with only weak political resistance to its invasion of Georgia, Moscow's leaders evidently believed that they could respond with ever-greater displays of verbal belligerence. Once again, Russian ministers thought that they could wage a small victorious war to secure their power at home and abroad at little or no cost, and once again, they miscalculated the true consequences.

Lessons to Ponder

Notwithstanding Russian policy, there is a profound lesson here for us as well, one that we should have learned as a result of Iraq and its international consequences. As Liddell Hart observed, the objective of war should be to create a better peace—a positively transformed political situation that engenders a stable, enduring, and legitimate postwar order. Force, to be successful, must soon give way to or create authority, a stable and legitimate order. The use of force must create conditions where force itself is no longer necessary after a war's military-political goals have been achieved, and the defeated side accepts the new status quo.[32] But Moscow does

not seem to have learned that lesson, as it has not brought a better peace or a legitimate order. Rather, it has shattered order, opening the way to arms races, military buildups, and greater rivalries throughout the region. Some may see easy comparison between this situation and that in Iraq. Nor are the repercussions confined only to Eurasia. North Korea quite probably chose this time to announce its suspension of cooperation with the Six-Party agreements of 2007 because it saw weakness in the initial European and United States replies to Russia.

However, Moscow should not take comfort from its military performance in Georgia. Almost immediately after the invasion, critical articles depicting all kinds of military failures have appeared in Russian and foreign presses and electronic media.[33] Some of these were obvious signs of an undisciplined force: public drunkenness and primitive looting of occupied areas, for example.

Statesmen have always attempted to gauge the benefits of going to war against the costs of doing so, while simultaneously weighing the benefits and costs of refraining from war. The present war suggests that in the case of the Russo-Georgian War, both sides failed to do so. Georgia catastrophically failed to reckon the benefits and costs of either line of policy. Indeed, its leadership seems to have ignored the possibility that Russia would retaliate in force to an initial Georgian operation, even if it were the result of a Russian provocation.[34] On the other hand, Russia seems to have thought only in terms of the short-term consequences. Russia reckoned that with America tied down in Iraq, divided from its European allies (themselves divided and frequently dependent on Russian oil and gas), it could safely reassert its prominence in the CIS by force and provoke Georgia into rash action. To that degree, though, Russian calculations seem to be correct.

Even so, dizzy from success, Moscow overreached and attempted not just to teach Georgia a lesson, but to redraw the foundations of the contemporary international order with limited means of maintaining that new order. Here it succeeded only in multiplying the costs to itself because it failed to recognize that, as much as Russia resents it, its security depends upon that order. The current Russian threat assessment presupposing an adversarial relationship with the West and charging that it is being encircled by NATO is in many respects a phony threat assessment designed to enhance the role of the armed forces and police at home and to cement the stability of an inherently unstable political system in the belief that *Nas ne lyubyat*, "nobody loves us." The reality is, since 1991, Russia has enjoyed living with the least dangerous set of external threats in its long history. NATO does not even have contingency plans for an attack against Russia. Only now is it beginning to discuss drafting such plans, and the allies are showing the first signs of greater cohesion than in the recent past.[35] Neither can Russia afford intense geopolitical competition with the West while maintaining a petro-economy based on an inherently sub-optimal economic model of Muscovite Tsardom.[36]

If a nation uses a limited war to revise the international order, and if that nation makes demands it cannot enforce, not only is international order destabilized (the same international order that protected the belligerent nation to begin with) but also there may not be a viable organizing principle for the new system to operate from or to legitimize the belligerent nation's security demands. Russia has singularly failed to translate its military achievement into legitimate authority and social order.

In the future, those who might commit their governments to war, in a world as densely interconnected as this one is, must not only weigh the benefits and costs of war, but grasp a fundamental lesson of our times: in wars of choice, the benefits obtained from an unprovoked use of large-scale force appear to be diminishing, while the costs to both the user of force and the victim of force are growing and have worldwide effects. This interconnection multiplies the primary, secondary, and tertiary costs of military adventures, like the one in Georgia, to primary combatants and to innocent bystanders. In Georgia's case, these bystanders are not only its CIS partners and neighbors, but also the

…since 1991, Russia has enjoyed living with the least dangerous set of external threats in its long history. NATO does not even have contingency plans for an attack against Russia.

Ukraine, Belarus, Central Asia, and even Europe and the United States. The reactions of these states to this war suggest that they, too, have "lost" the war in crucial ways and now are beginning to bear its political-strategic costs.

When everybody loses in a war, the cause of peace and of a just order in international affairs loses too. Ostensibly, those who threaten the use of force, or actually use force, may initially crown themselves victors in such conflicts. Moscow may convince itself that it has won a war in Georgia, but it has actually opened a Pandora's Box of cascading negative effects merely to gratify its own imperial fantasies of resentment and revenge. ***MR***

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CHINA'S ELECTRONIC LONG-RANGE RECONNAISSANCE

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Congress passed legislation this week requiring the Pentagon to report on China's growing computer-warfare capabilities when producing assessments of Chinese military power. The fiscal 2008 National Defense Authorization Act, passed yesterday by the House, contains a provision requiring the annual Military Power of the People's Republic of China report to include a new section on Beijing's "efforts to acquire, develop, and deploy cyberwarfare capabilities" in its assessments of China's "asymmetric" warfare capabilities.

—*Early Bird*, 14 December 2007

SINCE 2005, Chinese cyber attacks against U.S. systems have increased at an alarming rate. However, the term "attack" carries unwanted connotations; these unwarranted incursions are more likely reconnaissance missions to collect intelligence on U.S. military systems, to spot vulnerabilities or plant trap-doors or viruses in our systems, and to ensure that China's People's Liberation Army (PLA) has an immediate advantage in the event of war involving America and China. If the incursions were "attacks," then our systems would be down and destroyed. Instead, these computer reconnaissance measures appear to conform to an old Chinese stratagem: "a victorious army first wins and then seeks battle. A defeated army first battles and then seeks victory." Reconnaissance via computer to spot vulnerabilities before the first battle fits the stratagem well.

The United States, of course, is not the only country accusing the Chinese of unwarranted incursions. Germany, England, France, Japan, Taiwan, Australia, and others have also been Chinese targets. When one views these events in the light of open-source accounts of Chinese information operations (IO) theory over the past several years, there is much circumstantial evidence to find China guilty as accused. The only actual forensic evidence, of course, is classified and located in the security agencies of the countries that China has electronically invaded.

This article explains Chinese military thought that supports their cyber-attack activities. While other articles focus on who was attacked and how many times, this article focuses more on the theory behind the attacks, especially the PLA's use of electronic stratagems for their computer network operations and the use of surrogates such as patriotic hacker groups. The article reviews Chinese incursions since 2005 and examines open-source assessments provided by some of the most important Chinese information warfare theorists.

The PLA has followed theory with practice. Computer network operations have become part of the peacetime strategic activities of the PLA. More worrisome is the purpose of these incursions. Is it reconnaissance? Or is the

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purpose of these incursions to place Trojan horses or some other device into U.S. and other partner systems to disable or destroy them in case of war? As one reads about Chinese information warfare developments, it becomes clear that China's potential intentions raise questions.

IW Units and the Active Offense

While the exact reason for China's cyber attacks is unknown, we can follow a cause-and-effect rationale in Chinese contemporary writings. The cause of China's attachment to new information technologies and the "informatization" of their force is the dramatic impact the technologies have had on military affairs, most notably the U.S. use of technology in Iraq. The effect of these technologies on Chinese military thought is the Chinese belief that only countries that take the initiative in an information war or establish information superiority and control ahead of time will win, and that this requires reconnaissance and intelligence gathering before the first battle to set the stage for the use of cyber forces.

Historically, the PLA based its strategic philosophy on "active defense," meaning that China would never attack someone first but would be ready to respond if attacked. That philosophy has changed over the past few years with the advent of the cyber age. There has been a continuous stream of open-source descriptions of both cyber units in and offensive cyber operations by the Chinese military. The PLA's open recognition of a need for offensive operations reflects a significant break with traditional military thought. Further, the PLA has openly stated that U.S. reliance on computer systems is a huge vulnerability ripe for exploitation. If the PLA hopes to offset America's huge advantage in practical application of IO theory (in Kosovo, Iraq, and Afghanistan), it has to exploit that vulnerability. To understand this shift from defensive to offensive-minded operations, we must begin by looking at developments in 1999.

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1999

Nearly a decade ago, Chinese IO theorists were already discussing offensive actions. Zhu Wenguan and Chen Taiyi's *Information War*, published in 1999, contains a section called "Conducting Camouflaged Preemptive Attacks." The authors note that preemptive active offense is needed to disrupt and destroy enemy computer offensive forces.[1] A part of preemption appears to be network surveillance, which involves collecting information on the performance, purpose, and structure of systems related to C4I, electronic warfare, and weapon systems. The authors note that, in the broadest sense, computer information surveillance is a part of computer information attack. They state:

> To conduct computer surveillance, we can use computer information networks set up in peacetime and enter networks as different users to do the surveillance in an area broader than the battlefield. We can borrow the power of computer experts, especially hackers, to finish computer surveillance tasks . . . it can be seen that using hackers to obtain military information from computer networks is a very effective method. We should be familiar with network protocols and accumulate network intelligence.[2]

The authors add that the PLA established small brigades of offensive and defensive computer confrontation forces to conduct these attacks.[3] Offensive training includes how to design and organize virus invasions and how to enter the other side's computer networks. Offensive brigades must repeatedly study and analyze the enemy's potential. They must also be able to sort truth and deception, pinpoint enemy computer-control centers, and jam in targeted ways.[4]

In November 1999, a *Jiefanguin Bao* (*Liberation Army Daily*) article stated that China may develop an information warfare branch of service—a "net force"—to complement the army, navy, and air force. (While the article said this development was very likely to become a reality, there is no evidence to confirm the creation of such a branch of service today.) The force's task would be to protect net sovereignty and engage in net warfare. Elements of net warfare include "offensive and defensive" technologies, "scanning" technologies, "masquerade" (deception)

technology, and "recovery" technology. Masquerade technology would assist a person who wanted to dissemble as a commander and take over a net.[5]

2000

The idea of focusing on reconnaissance and stratagem activities arose as early as 2000. A *Jiefanguin Bao* article notes that units at and above army level should focus their study on reconnaissance and early warning, command coordination, and the application of strategy.[6] An article substantiating this thought appeared in the PLA's authoritative journal *China Military Science* (similar in importance to *Joint Force Quarterly*). The latter article notes that stratagems should create opportunities and favorable times for releasing viruses.[7]

Another *China Military Science* article clarified the offensive posture described in 1999. In it, General Dai Qingmin opines that offense is at least as important as active defense, and notes, "As the key to gaining the initiative in operations lies in positively and actively contending with an enemy for information superiority, China should establish such a view for IO as 'active offense.'" His view is that active offense is essential for maintaining information control, obtaining the initiative, and offsetting an opponent's superiority. Offensive information methods can help sabotage an enemy's information system.[8]

Dai, who became the head of the PLA General Staff's Fourth Department (Electronic Warfare), also notes that IO stratagems can be formulated before launching a war to serve as "a sharp sword" that sabotages and weakens a superior enemy, while protecting or enhancing China's fighting capacity. Information warfare can serve as a type of invisible fighting capacity to evade combat with a stronger enemy.[9] If a future information warfare goal is to defeat strong forces with weak forces using stratagems, then such methods are one of China's asymmetric means to combat U.S. high technology.[10] Stratagems would thus be one of the "magic weapons" that Chinese strategic culture is always stressing.

Finally, Dai's August 2000 article in *China Military Science* discusses the use of electrons as stratagems and the development of an integrated network electronic warfare capability. When combined with the active-offense concept, this article represents one of the most important information warfare articles written in China.

Other less notable publications also discuss offensive operations. In a March 2000 Internet version of *Computer and Information Technology*, analysts at the PLA's Electronic Engineering Institute at Hefei discuss the need for network confrontation teams and the requirement to conduct both defensive and offensive operations.[11] In September 2000, the journal *Guangjiao Jing* noted that the PLA had recently established information warfare departments within its headquarters organizations.[12] Thus, the idea of offensive operations was not limited just to Dai.

2001

The 2001 book *Science of Strategy*, published by China's National Defense University, includes a section on offensive information warfare operations. It states that strategic information warfare should "use offense as a main strategy but be prepared for both offense and defense." Further, it states, "We should use the strategy of the preemptive strike and seize the initiative. Actively launching an information offensive is the key to seizing information superiority and the initiative on the battlefield."[13] In this sense, the thinking appears to apply mainly to wartime and not peacetime action.

The *Science of Strategy* also describes the type of war to fight against networks. The book states that in a war of annihilation, nodes must be attacked to break up the network before attacking weapons systems. Information and support systems must always be the first targets to offset operational balance. *Science of Strategy* notes, "After strikes to damage the net and continuous operations and persistent weakening of the enemy, then vigorously launch an annihilating attack." Ground information warfare facilities, transmission means, reception platforms, and information-flow capabilities should be destroyed in that order. This type of attack enables one to "take away the firewood from under the cauldron."[14] While this scenario appears to apply to wartime conditions, it can easily be adapted to peacetime conditions as well.

Information technology has thus stimulated Chinese strategic thinking; military academics now argue that those who do not preempt will lose the initiative in what may be a very short-lived IO war. In modern conflicts, they suggest, it is easier to obtain the objective of war through one campaign or one battle than at any other time in history. This

line of thinking provides further impetus for the PLA to conduct cyber-reconnaissance activities in peacetime to prepare to "win victory."[15]

2002

An article from June 2002 states that PLA units were prepared to tamper "with information in terms of order, time, flow, content, and form; deleting information in parts, in order to create fragmented information; and inserting information to include irrelevant information in order to confuse and mislead each other."[16] The author adds that two sides in a computer confrontation may attempt to invade each other's information networks by transplanting computer viruses to downloadable software that can be activated when necessary in order to sabotage each other's computer systems.[17]

General Dai Qingmin wrote in 2002 that a priority for the PLA was to acquire offensive information operations equipment, and that the PLA must take and maintain the initiative.[18] Other publications weighed in as well on this point.

Jiefangjun Bao, for example, carried an article in August of 2002 about the forms of network attacks. These were listed as "premeditated" (i.e., a persistent computer virus embedded in software), "contamination" (aimed at the quality of information), "strong" (refering to the forced modulation of computer viruses into electromagnetic waves), and "fission" (the strong regeneration capability of a virus).[19] All are capable of being inserted in peacetime, except perhaps the "strong" variety.

2003

At the 2003 10th National People's Congress, PLA representatives revealed that it would activate the first high-tech information warfare units in Beijing that year. The report stated that the units would eventually be in all PLA armies. Information warfare units would be outfitted with high-tech equipment, and have the ability to conduct network warfare on the Internet and the capability to transfer data via remote sensing satellites.[20] How the "first" information warfare unit differs from the information warfare brigades under discussion in the 1999 Chinese book *Information War* is unknown.

General Dai, writing in 2003, stressed once again the importance of carrying out information attacks.[21] Dai wrote that information warfare is "precursory" (begins before other operations) and "whole course" (runs throughout an entire operation). Perhaps the current emphases on gaining the initiative and on short wars are the main reasons that Dai gives the impression that preemption via information warfare is a necessity in future war.[22] He notes:

> Actions such as intelligence warfare, psychological warfare, and campaign deception in advance of combat seem to be even more important to the unimpeded implementation of planning and ensuring war. For this reason, information warfare must be started in advance of other combat actions before making war plans and while making war plans.[23]

Specific reserve units also engage in information warfare activities. For example, in late 2003 the monthly journal of the PLA Academy of Military Science, *Guofang*, gave specific instructions on network attack activities to reserve units. Author Li Mingrang says that information storm troopers as "first forces" must be established from the talent of local communications, telecommunications, and financial departments and from scientific research institutes and institutions of higher education. Stratagems must be developed to increase system survivability.[24] Li adds:

> There is no shortage of computer experts and network jockeys among them, any one of whom could become a network guerrilla who could open up a gunpowderless battlefield all by himself by harassing attacks on the network, namely by releasing large volumes of data from many directions concentrated on some enemy network station to jam up its network router and bring the network station to a standstill…and once there is a military requirement, either enter the network system to steal intelligence or to activate viruses or detonate 'bombs' to achieve the combat target of destroying the network.[25]

Reserve forces are directed to work on offensive strategies.

In his 2003 book *Deciphering Information Security,* China's "father of information warfare," retired Colonel Shen Weiguang, wrote about the development of an information security university with a military information security specialty. The specialty

teaches, among some twenty-plus topics, "A Study of Hacker Attack Methods," "Network Intrusion Detection and Defending against Attack," "Information Attack and Defense Tactics," "Computer Virus Program Design and Application," "Network Security System Structures," and "Scanning for Hidden Troubles in Networks."[26] Many of these topics would fit the definition of PLA's peacetime computer network operations incursion activities.

2005

In the 2005 book *Study Guide for Information Operations Theory*, General Dai and his associates defined 400 IO-related terms, many related to preemptive or reconnaissance activities. Only computer network warfare is described here:

> Computer network warfare is composed of computer network reconnaissance, computer network attacks, and computer network defense. Operations mainly involve the use of armed and equipped network warriors. The means of operations include various types of viruses, logic bombs, and chip weapons developed from computer technology. Computer network warfare will act as both a deterrent and a means of warfare, and it can have a large and profound impact upon the enemy's politics, economics, and military. It is also an important means of battle for a less well-equipped military against one with formidable strengths in high technology.[27]

Dai also discussed the importance of the conduct of warfare, focusing on information deterrence as a concept to consider and develop further at the strategic level. Others who have written on the topic of information deterrence include Shen Weiguang. The book *Science of Military Strategy* devotes an entire chapter to the topic. The latter source explains how information deterrence (intimidating by demonstrating one's information power or might) can help achieve national and military objectives. Deterrence methods include information technology (hardware and software innovations), information weapons (discursive dissimulation or disinformation), and information-resource suppression (analogous to jamming). According to some Chinese authors, counter-information deterrence theories must also be considered.

In *Warfare Strategy Theory* (2005), Yao Youzhi asserts that strategy has developed to the point where technological considerations dominate and the use of technology has become strategic. Any strategy that distances itself from focusing on high-technology weapons has no useful value, according to Yao. This also means that China must develop sound counterstrategies.[28] He writes:

> It is necessary to be proficient at utilizing the information superhighway, creating misleading information, spreading the fog of war, and jamming and destroying the enemy's strategic awareness, thereby using strategy to control the adversary. It is necessary to be proficient at using electronic feints, electronic camouflage, electronic jamming, virus attacks, and space satellite jamming and deception, leading the enemy to draw the wrong conclusion and attaining the goal of strategic deception.[29]

While designed for wartime use, several of these techniques work as peacetime preventive and preemptive measures as well.

In "stovepipe" structured commands of the past, a force calculated its strength by adding together all of its parts. Today, a force's combat strength is a product of operational elements where information technologies factor into a potentially exponential multiplication.[30]

Yao writes that "informationized" warfare has changed the traditional significance of "attack, capture, control, and defend" because precision attacks have made possible the destruction of the enemy's entire war system. The primary attack target has become an enemy force's strategic information system. All activities now revolve around gaining battlefield supremacy, and information supremacy is the foundation of battlefield supremacy. Directly destroying an enemy's will has supplanted the annihilation of an enemy's military capability. This focus on information invites completely new methods in future wars.[31]

2007

Author Zhang Zhibin notes in *Jiefanguin Bao,* 13 March 2007, that the dialectical relationship between offense and defense in network warfare must place equal emphasis on each. A network deterrence theory implies that both capabilities are necessary,

AP Photo, Andy Wong

A computer screen displaying a military website is seen inside an army base in Tianjin, on the outskirts of Beijing, China, 30 July 2007. Computer networks have been targeted by cyber spies that media reports say are directed by China's military, but China denies backing such attacks.

offense to scare any potential enemy force, and defense to thwart any attack. Zhang says:

> Only by doing a solid job of positive defense can China ensure winning the initiative in network warfare. Thus, China should make unremitting efforts to seek such preemptive opportunities through developing network technology and systems and making corresponding network defensive operations research and implementation.[32]

Other articles from 2007 stress a need for PLA action to gain network control, including access, if possible. Two books on Chinese IO by this author, *Dragon Bytes* and *Decoding the Virtual Dragon,* mention this focus on control.

…information supremacy is the foundation of battlefield supremacy.…This focus on information invites completely new methods in future wars.

Probable Chinese Computer Attacks against America

Over the past several years, Chinese information warfare and IO capabilities have become more visible and troubling. China has used these capabilities not only against the U.S. but reportedly against Japan, Taiwan, Germany, England, and Australia as well. Due to the nature of computer network operations, exactly how many Chinese information warfare reconnaissance or offensive events have transpired or the actual intent of these incursions remains unknown. Those episodes that have leaked into the public domain include the following:

- Espionage conducted against the U.S. Department of Defense computers, reported in *Time* magazine. The report concerned a Chinese cyber espionage ring that federal investigators codenamed Titan Rain.[33]
- Chinese attempts to blind a U.S. satellite, reported in *Defense News*. The report discussed high-powered Chinese laser attacks on a U.S. satellite.[34]
- Chinese hacker attacks on the U.S. Naval War College's net capability, reported in *Federal Computer Week.* This attack purportedly originated from China and took systems off-line.[35]
- The Chinese destruction of an old Chinese weather satellite with an anti-satellite missile, reported on National Public Radio. The report cited a Beijing People's University commentator. He noted, "Satellite-killing technology is logical in the development of missiles and an information warfare capability."[36]
- A sophisticated computer attack on Tennessee's Oak Ridge National Laboratory in October and November 2007. The assault was in the form of phony e-mails which, when opened, allowed hackers to penetrate the lab's computer security.[37]
- Hacker attacks against Japan and Taiwan, reported in the Japanese and Taiwanese press.[38] The reports noted that these attacks were retaliations for Japan's anti-Chinese interpretations of history and for Taiwanese claims for independence.

On 5 September 2007, the *Kansas City Star* carried an article in which China denied cyber-attacking any country. Foreign ministry spokesperson Jian Yu noted, "The Chinese government has always opposed an Internet-wrecking crime, including hacking, and cracked down on it according to the law."[39] He dismisses accusations of Chinese attacks

on Pentagon computers as "groundless." A Pentagon spokesperson refused to say if the perpetrator was China, but Britain's *Financial Times* quotes an unidentified senior U.S. official as saying the source had been traced to the PLA.

A week earlier, Germany's *Der Spiegel* magazine reported that the PLA had infiltrated Germany's government computer systems. The report said the hackers had been traced back to Guangzhou and Lanzhou.[40] Thus, circumstantial evidence continues to grow. It is difficult to believe that Germany, Australia, Japan, Taiwan, and America are all conniving to indict China and portray it as a new threat. Indeed, through unprovoked cyber operations, China seems to have indicted itself without anyone's assistance.

China's Use of Surrogates

One of China's stratagems is to "attack with a borrowed sword." Perhaps the use of patriotic hackers fits this stratagem. A recent article in *Time* magazine discussed the use of a "network crack program hacker" (NCPH) group initiative to accomplish this goal. The article said the PLA had developed a competition for hackers and that the winner would receive a monthly stipend from the military. It noted that the NCPH group not only won the competition and received the stipend, but the PLA also used the NCPH to teach techniques and procedures to other members of the PLA's cyber-warfare team. A U.S. branch of VeriSign, iDefense, has noted that China's NCPH created 35 programs to implant Trojans (which take partial control of computers) and that these programs attacked U.S. government agencies. VeriSign's iDefense accused the NCPH of siphoning off thousands of unclassified U.S. documents. Such activity would fit the PLA's preemption focus.[41]

The concept of "people's war" also fits with so-called patriotic hacking. "People's war" in the cyber age means that citizens get involved with hacking or cyber attacking an enemy's systems. Presently over 250 hacker groups operate in China.[42] Quantity could thus create a quality all its own with the variety and intensity of incursions they could conduct. None could be traced directly to the PLA if hacker groups are private citizens (or for that matter, military members or military reservists conducting cyber operations from their home computers). Again, circumstantial evidence is all that one has to go on, but that evidence is becoming overwhelming.

One of China's stratagems is to "attack with a borrowed sword." Perhaps the use of patriotic hackers fits this stratagem.

Conclusions

Chinese theory over the last several years indicates that China wants to become proficient in active offense, cyber reconnaissance, cyber-stratagem, and computer exploitation activities in case the PLA has to go to war. If China feels it can gain the initiative by obtaining information superiority or by preventing cyber strikes, then the coming years may involve challenges from that sector. While it remains easy to measure the intent of troop deployments, the intent of a Chinese electron is harder to measure. Is it inserting a virus, conducting reconnaissance, or disabling a system? The world will move into uncertain territory as nations attempt to conduct responses to and develop consequence management actions for truly disruptive electronic intrusions.

The Chinese note that IO tactics and techniques allow more emphasis on the principle of offense than on traditional warfare. A weaker force, for example, can inflict much damage on a superior force with a properly timed and precisely defined asymmetric information attack. China portrays itself regularly as the weaker side of the U.S.-Chinese relationship. It thinks that offensive operations such as information deterrence, information blockade, information power creation (electronic camouflage, network deception, etc.), information contamination, information harassment, nodal destruction, system paralysis, and entity destruction are key to victory in a modern conflict with America.

One should remember that this analysis stems only from open-source information and public comments from the PLA, and that China's understanding of the intersection of strategy and information technology, especially as it relates to actual conflict, is not extensive in a practical sense. The

Chinese have little recent experience with conflict. Their forces have not fought an actual war in decades. From a theoretical perspective, however, China has written extensively on the use of information technology and electronic preemption and given both much thought. Chinese cyber intrusions indicate that the Chinese are gaining a lot of practical and theoretical experience in peacetime.

The PLA's open-source comments can be interpreted either as an attempt to work with the West or to vigorously oppose it. Perhaps the PLA is being very open and transparent in its cyber strategies, perhaps more open than in any other area of military operations. (The PLA is far more open with its information warfare thinking, for example, than Russia.) If the PLA's intent is to oppose the West, it may in fact be concealing rich information warfare concepts in PLA "rules and regulations" (the PLA's equivalent of doctrine) within the general staff directorates and research institutes. China's information warfare rules and regulations are not available to other nations, while unclassified U.S. doctrine is available to anyone on the Internet. The PLA keeps its rules and regulations close to its chest. In this case, lack of transparency introduces unwanted ambiguity. America and other nations under threat of PLA incursions may react harshly to some scenarios developed by the Chinese and, thus, unintentionally set off a conflict.

How and when China might use its active-offensive concepts for purposes other than reconnaissance is unclear, but, as general concepts, they are worrisome. It does not bode well for future cooperation and stability if Chinese theorists really do believe (as they openly state) that China can offset an opponent's information superiority only if China strikes first. China will no doubt continue to use technology in conjunction with innovative stratagems to try to deceive our high-tech systems or perhaps even to force errors in the cognitive processes of U.S. decision-makers. We live in interesting times. ***MR***

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ON METAPHORS WE ARE LED BY

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Reflection

Metaphor is one of our most important tools for trying to comprehend partially what cannot be comprehended totally: our feelings, aesthetic experiences, moral practices, and spiritual awareness. These endeavors of the imagination are not devoid of rationality; since they use metaphor, they employ imaginative rationality.

—George Lakoff and Mark Johnson[1]

DESPITE PRINCIPLED ATTEMPTS to prosecute "information operations" and "strategic communications," there is scant discussion in current military discourse about how people assign meaning to their perceptions. This essay investigates how the use of metaphor shapes understanding in an increasingly ambiguous world of meaning. Indeed, the rhetorical work of pundits, politicians, appointees, bloggers, academics, military doctrinaires, and flag officers (those I call "thought leaders") is largely the management of meaning. That is, thought leaders engage in persuading the naïve, the obtuse, or those with different understandings to follow their narrative constructions, which are often riddled with metaphors.

In a world of vagueness and ambiguity, coupled with global interconnectedness, the range of possible meanings geometrically multiplies to unimaginable degrees. Some subscribe to the "information age" metaphor, suggest that objective "facts" are omnipresent, and wonder why the truth they see is not as clearly seen by everybody else. Yet global information media amplify the diversity of meanings and the expansion of useable metaphors. Without such a multiplicity, a greater shared understanding would be implausible; still, ever-changing expression creates frustration as well. Those aspiring leaders who seek to influence and indoctrinate others with their own sense of bringing verbal clarity have to be mindful of creating frustration and misapprehension. Wars, messy social problems, and disasters present ineffable complexities that metaphors only approximate. With the clever and often hidden use of metaphors, the most effective thought leaders indoctrinate others to grasp and communicate the intractable or inscrutable. This essay proposes a framework that can help military practitioners judge the appropriate use of metaphor and be more reflective about how indoctrination can work to shape their "sensemaking" in important ways.[2]

A Framework for Reflecting on Metaphor

The term metaphor is derived from the Greek word *meta-* which means "beyond," and *-pherein,* which means "to bear." Hence, metaphor takes us beyond surface textual meaning and serves as a substitute for literal

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or objective definitions of complicated matters. Non-Defense Department communities have often borrowed military words and phrases to convey meaning where otherwise impossible. For example, businesses and other public organizations borrow terms like "strategy" (from the Greek word for "generalship"); they declare "war" to "defeat" social problems like poverty, drugs, AIDS, and illegal immigration; and they employ "tactics" (from the Greek for "orders") for negotiating deals and winning against competitors. For centuries, the military community has perhaps unwittingly drawn on language from other communities to reduce the ambiguity it faces: center of gravity (from physics), operational art (from the design studio), and enemies that operate asymmetrically and as networks (from the biological sciences). Here are some others that may be familiar: mapping human terrain (the logic of cartography applied to sociology), mission creep (like a sneaky arachnid or "slow-river-rising" analogy), global war on terror (an ecumenical story of the dichotomy of good vs. evil). In short, thought leaders in various knowledge communities "manage meaning," that is, they employ metaphors as:

- Sensibility-on-loan (from other knowledge forms).
- Exemplars for the otherwise unfamiliar constituency (analogy is better than total ignorance).
- "Bridges" from what they tacitly know but cannot say (mysteries) to others' quasi-comprehension.
- Implicit substitutes for inexplicit reality (symbols of reality).
- Purposeful ambiguities (equivocations) to gain support from otherwise conflicting interpretations (often used in political rhetoric).
- Euphemisms or hyperbole (defectively absurd if taken literally).
- Mind-imageable idioms (in-*sight*-ful ways of looking at things).
- Imaginative "frames" of reference (creative, and even poetic).
- Metaphysical explanations (permitting pseudo-awareness).[3]

Three primary sources of metaphor are at work in the contemporary Western military community of thought: Newtonian science (as portrayed by the knowledge disciplines of physics, engineering sciences, architecture, etc.); post-Newtonian science (complex biological sciences, physiology, etc.); and the humanities and fine arts (history, literature, the performing arts, and so on).

Each primary source of metaphor reflects a dominant view of reality. When taken together, they form a synthetic concept of reality construction—that of sensemaking. These bodies of metaphor are best portrayed by crossing two continua, the "objective-subjective" continuum and the "simple-complicated" continuum. The resulting quadrants are: *objective-simple* (Newtonian science), *objective-complicated* (post-Newtonian science), *subjective-simple* (the humanities & fine arts), and the most conceptual of all, *subjective-complicated* (sensemaking). Although these categories of metaphor exist simultaneously, examining each category separately and with examples helps in understanding how thought leaders employ them as "sense-givers" (see Figure 1).

As aforementioned, in this heuristic Newtonian science is associated with the objective-simple quadrant, post-Newtonian science with the objective-complicated quadrant, and the humanities and fine arts with the subjective-simple quadrant. This framework helps illustrate how thought leaders can feed on metaphors from potentially incompatible views of reality. Sensemaking about complex issues ("this is an insurgency") can only offer an appearance of objectivity ("insurgency is a disease") and in doing so can lead to crippling misapprehensions ("we can intervene to stabilize health"). To enable better understanding, the military practitioner can use this heuristic framework to reflect critically on the strengths and weaknesses of the metaphors used by thought leaders ("this insurgency is not really a disease, it has many incomprehensible complexities that exceed those of medical practice").

Newtonian science metaphor. Newtonian science is underpinned by an empiricism probably best exemplified by the philosophical rigor of "logical positivism" (a term coined by the Vienna Circle in the 1920s). These positivists thought that true knowledge could only be discovered by removing all reference to metaphysical explanations of why things are the way they are. Logical positivists were more concerned about logic in language and set theory than about empirical science, but their technique has informed the way Westerners employ scientific metaphor for non-scientific endeavors. We can be "positive" about our "logic" of external

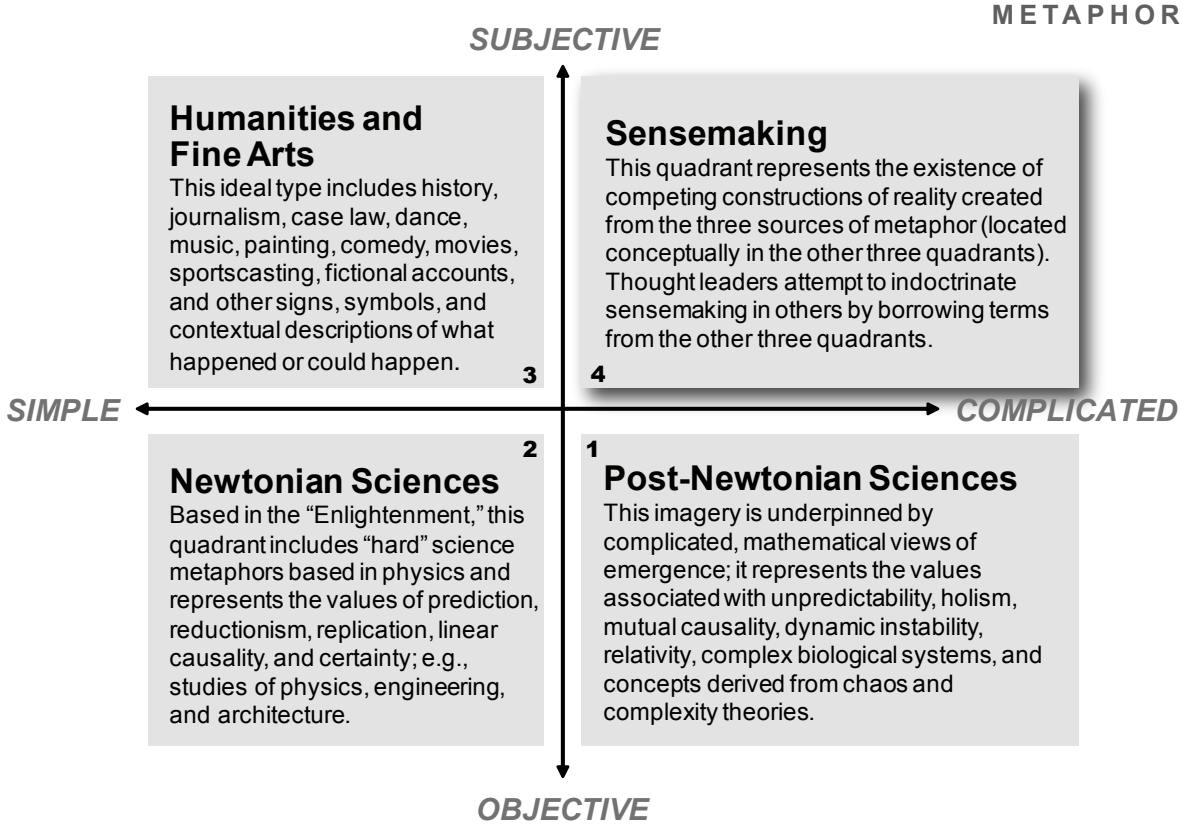

Figure 1. Framework for reflecting on metaphors.

reality as we experience it with our objective five senses. Hence, to understand the world, we isolate variables in terms of objective experience and reduce them until we think we can discern the simplest cause-and-effect relationships among them. In Western societies, thought leaders tend to use Newtonian mechanics to facilitate understanding of sense experience, and they resort to mechanics for metaphorical apprehension of complex meaning. Such a worldview can imply, erroneously, that even complicated human problems will yield to an empirical isolation and reduction process. These engineer-like metaphors thus impose an objective-simple sense of reality to evoke comforting images of "applied science": prediction, problem reduction, finding one-way causality, and certainty in replicating these relationships between variables. Such intellectual comfort comes at the price of oversimplification.

Politically motivated thought leaders may speak, for instance, of the *spread* of democracy that will cause world peace. Military-minded thought leaders may indoctrinate the troops, similarly, to believe they are part of an *instrument of power* and will help solve the problem of rogue actors and terrorists by attacking their *centers of gravity*. The indoctrination of the term *military power* is taken for granted in the military community to the point of losing touch with its metaphoric basis of meaning in Newtonian physics (some would call this a "dead metaphor"). Yet, this model resurrects the root metaphor and exposes its reference to positivistic physical laws and their related images of force to symbolize *power* (as in armed forces), *mass* (as a recognized principle of war), and *speed* and *direction* (as in maneuver).

We find more subtle uses of Newtonian metaphor as well. Alexandr A. Svechin, the Russian "father of operational art," provided this Newtonian, geological image of military planning in the late 1920s: "Actions will become ordered and coalesce into small streams flowing down to the goal and will form one broad stream as a result."[4] David Galula,

… intellectual comfort comes at the price of oversimplification.

in his classic book, *Counterinsurgency*, uses Newtonian states-of-matter metaphors to describe the asymmetry of the opponents: "The insurgent is fluid because he has neither responsibility nor concrete assets; the counterinsurgent is rigid.[5]

Paradoxically, the use of Newtonian hard science analogies, such as "force of gravity," can soften the realities of war, as indicated in a General Peter Schoomaker (former Army chief of staff) speech, when he said:

> Last week I talked to one of our senior officers who lost his second son two weeks ago, a Lieutenant serving in Baghdad leading his platoon. So when I look at the rocks that some people are carrying in their rucksack, it makes our load seem relatively light.[6]

Thought leaders thus treat complicated situations as if they could be solved with something akin to "applied science" by unconsciously employing Newtonian science metaphors. They imply one-way causality, such as this "police-reduce-crime" analogy used by General Peter Pace to influence the public on how to think about counterinsurgency operations:

> If you would use the analogy of a police department in a city, it's not that the city itself is without crime, but that the police department itself is capable of keeping the crime level down at a level below which the society can function.[7]

Finally, the most recent Army Field Manual 3-0, *Operations*, quoted the secretary of defense using Newtonian metaphor when he spoke of:

> …states enriched with oil profits and discontented with the current international order; and Centrifugal [*sic*] forces in other countries that threaten national unity, stability, and internal peace.[8]

In sum, these examples reflect the Newtonian-oriented, "Western" cultural proclivity to subscribe to an "objective-simple" reality. Today, the epistemological norms of logical positivism best express this approach.

Post-Newtonian science metaphor. Economist Kenneth E. Boulding suggests that revolutionary changes can occur when a new set of metaphoric meanings "converts" us, resulting in a "reorganization of the image" that can sometimes be spectacular.[9] Some have argued that such a spectacular change in imaging has come from a major shift in metaphor—from Newtonian to post-Newtonian science—stemming from revolutionary ideas in biological sciences, quantum theory, and chaos and complexity theories. Thought leaders call on the language of these theories invoking objective-complicated images to create visions of complex or chaotic patterns and dynamic interactions.

Paradoxically, the use of Newtonian hard science analogies, such as "force of gravity," can soften the realities of war…

Instead of valuing the inherent predictability associated with Newtonian mechanics, thought leaders attempt to indoctrinate others with post-Newtonian metaphors that allude to complexity. Post-Newtonian metaphors are more useful when addressing ineffable complexities in social issues such as war, poverty, world hunger, and so on. Such issues possess autonomous factors whose networked relationships exhibit adaptive qualities that will not yield to a mechanistic analysis. Where Newtonian metaphors (appropriate for mindless, physical models) have been used to understand complex and adaptive systems, understanding of the network's emerging relationships has gone wanting. Biological, post-Newtonian models work better as metaphorical conceptions for understanding such emergent qualities in complex systems.

The biological model of a complex adaptive system serves as the basis for the *Capstone Concept for Joint Operations*. Here is an excerpt:

> Military, political and social entities and situations are complex, adaptive "systems." . . . Complex and adaptive adversaries will likely employ traditional, irregular, disruptive, and catastrophic methods singularly or in combinations that are intended to keep the future joint force from being successful across the range of military operations. While many events will be unpredictable and uncontrollable, broad patterns often emerge and systems respond to outside influences, purposeful or otherwise. Recognizing these patterns and applying integrated systemic actions across multiple domains enables

> the joint force to achieve notable success in complex operational environments.[10]

Now here is a similar quotation from current doctrine, Joint Publication 5-0, *Joint Operation Planning*, that uses this objective-complicated type of metaphor:

> Although the systems approach is helpful in understanding the complex nature and composition of a given system or subsystem, this approach cannot account for all variables. Most systems can often exhibit unpredictable, surprising, and uncontrollable behaviors. Rather than being an engineered solution, a military operation evolves as the joint force adapts responsively to systems that also are adapting.[11]

Current discourse on the revolution of military affairs calls for developing so-called "networkcentricity" and "systems of systems" that match the complexity of the operating environment. Such approaches strive to look for emergent patterns and clues in conducting what have been termed "effects-based operations" by using methods akin to social network analyses. Revolution of military affairs discourse evinces numerous similar heuristics, such as the operational net assessment (ONA), associated with organic, holistic conceptions of stability operations. In at least one military publication, ONA has been reduced to these interrelating systems and their relationships: political, military, economic, social, infrastructure, and information (PMESII). Operational net assessment looks at how each might map to external manipulation to achieve holistic PMESII effects through interaction with other variables of diplomacy, information dissemination, military action, and economics. The diagrams compared in Figure 2 illustrate process similarity between ONA and organic chemistry.

Using complexity theory as a metaphor, authors of Joint Warfighting Center Pamphlet 7 created this system-of-systems diagram that they associate with effects-based thinking in systemic operational design. Academics in the business and public policy sciences are communicating with similar post-Newtonian imagery, including "disruptive evolution," "unpredictable trajectory," and "quantum leaps." Examine this quotation from two University of Colorado researchers:

> The terrorists attacks on September 11, 2001 demonstrated clearly the urgent need to develop the skills of complexity thinking—to recognize changes in the larger context; to take a big picture approach to intelligence-gathering and national security; to develop a deeper understanding of the system dynamics influencing regional politics and conflicts; and, most importantly, to enhance our understanding of complex sociopolitical human systems.[12]

Even the oft-used term "transformation" is borrowed from the logic of studying complicated biological systems and now permeates international military discourse (e.g., NATO's Allied Command Transformation). Simply stated, biological transformation occurs when organisms, as open systems, adjust to the environment by changing the way they transform inputs from the environment into outputs back into the environment. Ideally, military transformation metaphorically expresses continuous change from one state to the next dependent on

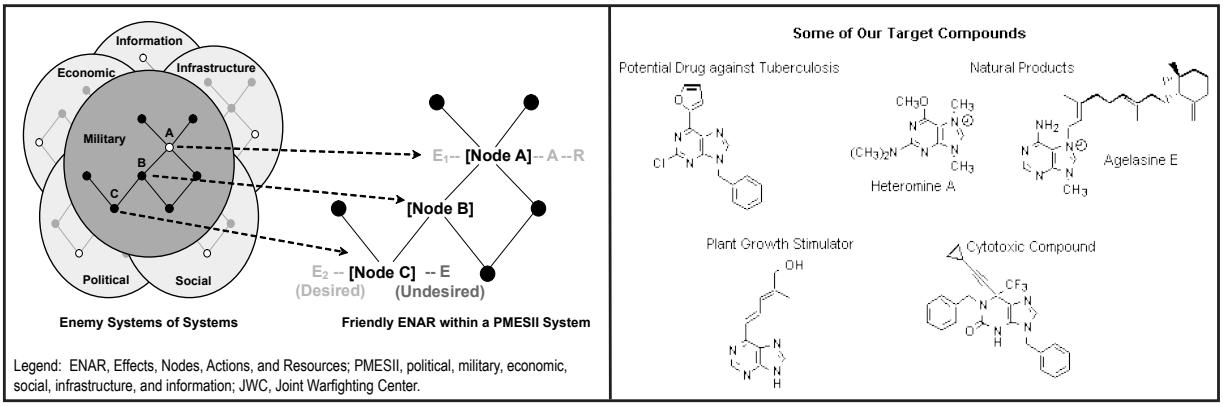

Figure 2. Conflict as a biochemistry metaphor.

environmental pressures, just as a species would evolve over time or an individual organism would adapt in responding to the survival needs in a given environment.

Thought leaders also use metaphors from the physiology of the human body to portray war and its complicated operations. For instance, consider this 2001 quote from Richard Haas, then director of the Office of the Policy Planning Staff, U.S. State Department, where he attempts to indoctrinate his listeners to a terrorism-as-disease metaphor to convey the complexity at hand in the War on Terrorism:

> Another way of looking at the challenge is to view international terrorism as analogous to a terrible, lethal virus. Terrorism lives as part of the environment. Sometimes dormant, sometimes virulent, it is always present in some form. Like a virus, international terrorism respects no boundaries—moving from country to country, exploiting globalized commerce and communication to spread. It can be particularly malevolent when it can find a supportive host. We therefore need to take appropriate prophylactic measures at home and abroad to prevent terrorism from multiplying and check it from infecting our societies or damaging our lives.[13]

President Bush alluded to a post-Newtonian image of mutual causality (associated with complexity theory) in the dynamics of war when he reflected on the initial combat successes in Iraq:

> Had we to do it over again, we would look at the consequences of catastrophic success, being so successful so fast that an enemy that should have surrendered or been done in escaped and lived to fight another day.[14]

The paradox inherent in Bush's explanation is that there was no way to "look at the consequences" ahead of time, but only in retrospect. Sometimes thought leaders mix up the unpredictability associated with post-Newtonian metaphors with the false determinism that mechanistic Newtonian metaphors permit.

Humanities and fine arts metaphors. Non-scientific communities of knowledge, such as humanities and fine arts, offer more nuanced metaphors that thought leaders can use to communicate understanding when mechanistic and biological models do not work as well. Such non-empirical metaphors reflect expressions with complex psychological implications.

As an example, Chris Matthews (of MSNBC's *Hardball* fame) used these stories to describe President Reagan's presidency:

> He was the political street fighter who got up off the dirt to win the 1976 North Carolina primary when nearly everybody counted him for dead. He was the cold-blooded gladiator who strode to the podium of that year's Republican convention and delivered such a barnburner it made people wonder what Gerald Ford, the party nominee, was doing on the stage. He was the no-nonsense boss who fired thirteen thousand striking U.S. air traffic controllers. . . . When Reagan spoke about the boys who stormed Normandy, or the astronauts lost in the *Challenger*, he tapped into the deepest sentiments of his hero-worshipping compatriots. While he may never have fought in World War II, he evoked its aura with greater success than anyone who had ever lived on K-rations.[15]

Former Secretary of Defense Donald Rumsfeld used this World War II historic analogy to communicate meaning in aiming to develop a specific morale:

> Take speed. After the attack on Pearl Harbor in 1941, Doolittle shocked the world by retaliating against Tokyo, some 4,000 miles from Hawaii, in just four months. In 2001 the United States struck a terrorist regime in Afghanistan, nearly 7,000 miles from the World Trade Centers, less than a month after September 11th.[16]

In another example, former Chief of Staff of the Army General Peter Schoomaker employed a sports analogy when he proclaimed that his officers must be more adaptable and less specialized in their careers:

> We cannot afford, in my view, to specialize totally to units for single purpose any more, especially in this ambiguous environment, not only the contemporary operating environment, but the one that we're going to face in the future. So what we're looking at here is going from single and dual event athletes to decathletes and pentathelete kind of formations that allow us to be successful in a variety of events.[17]

This quadrant of the framework evokes a "sixth sense" that those viewing the world from the lower

quadrants may ignore—that is, the stories associated with a sense of retrospection (images of what has happened), aesthetics (images of what is beautiful), context ("with text," to create a mental image), and the counterfactual (images of what could happen, could have happened, or what is perceived as possible right now or in the future).

Sensemaking. Human nature is often too complicated to ascribe meaning based on a single type of metaphor. The subjective-complicated quadrant from Figure 1 ("sensemaking") represents a hybrid of types of metaphor already discussed. Sensemaking reflects how thought leaders seek to construct reality for others by drawing on metaphor from the other three types (Figure 3); hence, "making sense" often becomes the mixing bowl of metaphoric types. This analogical perspective illustrates how thought leaders aspire to indoctrinate others' understanding of otherwise uninterpretable, incoherent, or disorderly discourse. Thought leaders create political rhetoric, psychological schema, opinions, arguments, judgments, and other metaphoric constructions of reality in attempts to formulate shared meaning. Within the framework's heuristic, all conceptual quadrants promote social constructions of reality. Whether or not such constructions correspond to an objective world depends on how effectively these constructions serve to replicate it. One or more quadrants may dominate over others at various points in time and may vary across and inside various knowledge communities (i.e., the effectiveness of these blends has cultural implications).

Thought leaders feed on metaphors from the other three views of reality while they attempt to impose their view of reality (upper-right quadrant), their sensemaking, on others.

Implications of the Framework

From the "post-positivist," multiple perspectives that this model permits, the basis of professional military knowledge seems to heavily favor the sensemaking quadrant. A major implication is that military doctrine and "future concept" discourse seldom seem to adhere to the positivist communities' standards (i.e., the exactness required of academics and professionals engaged in the empirical sciences). Positivist discourse entails austere norms

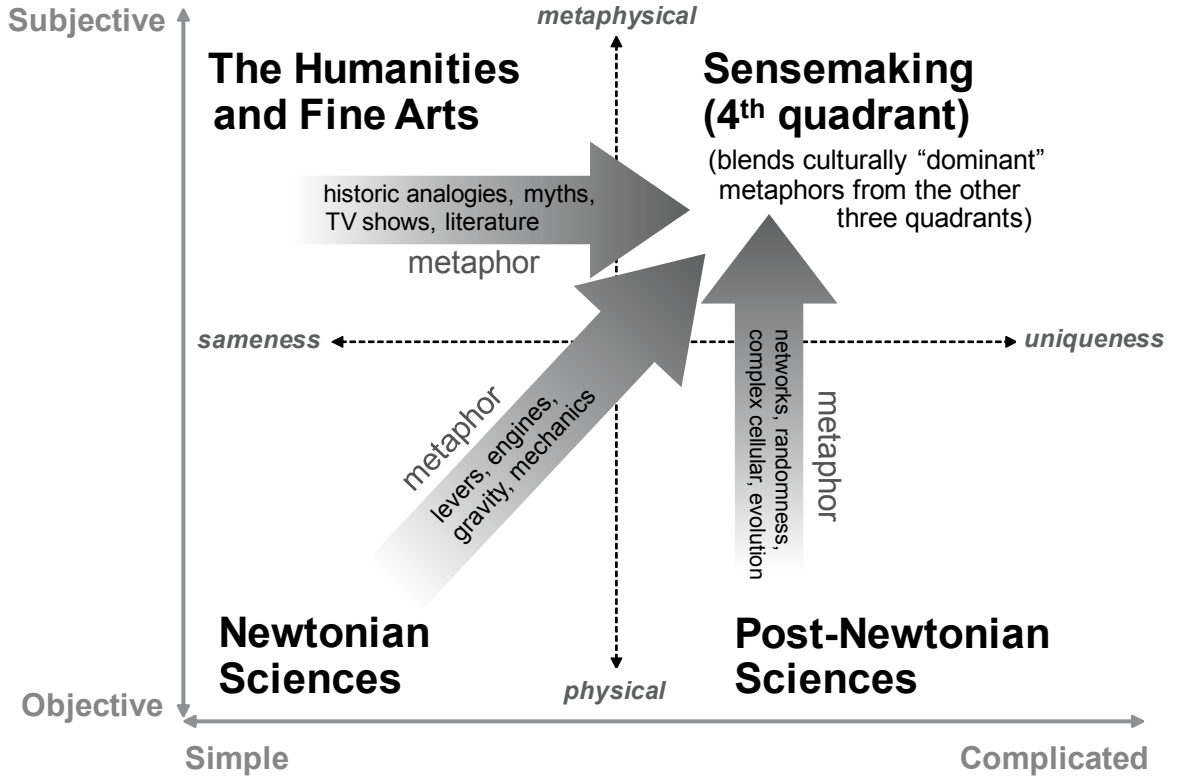

Figure 3. Three sources of metaphoric sensemaking.

and values of intellectual argument found, for example, in peer-reviewed applied science journals and textbooks. Such standards include attributing authorship to individuals, adhering to a custom of making citations, documenting a rich audit trail of intellectually rigorous discussion, and socializing a revulsion toward plagiarism. The absence of strictness in military indoctrination efforts should underscore that doctrinal and future concept texts are only weakly supported by a façade of scientific metaphors and therefore do not reflect knowledge values of the applied sciences. They are rarely, if ever, subject to the rigor of scientific knowledge management. More often, they are founded on received wisdom from sense-givers who are rarely subjected to critique. In that regard, military doctrine and so called "futures concepts" should not warrant recognition as a professional body of knowledge when compared to the natural sciences.

The framework above is a heuristic for critical thinking. It can help one recognize and discern metaphor to be on guard against the influencing process of thought leaders and the specious logic they may employ, knowingly or not. One might even conclude that military thought leaders' reliance on Newtonian and post-Newtonian metaphor reveals a pretense of knowledge because it implies predictions about events and environments that are inherently intractable. A case in point is the three levels of war (tactical, operational, and strategic) metaphor produced under the sense-givings of key 1970s, post-Vietnam, military thought leaders, Generals William E. DePuy, Donn A. Starry, and Creighton Abrams. The three levels of war present a façade of Newtonian-style empiricism that eventually became enshrined as categorical truths for study of complex military organizations and their operations.

The military's professional community has largely lost track of Newtonian root-metaphors. Conceptions of truth have commensurately spiraled into objective-simple images that often inappropriately reflect mechanistic (i.e., dangerously

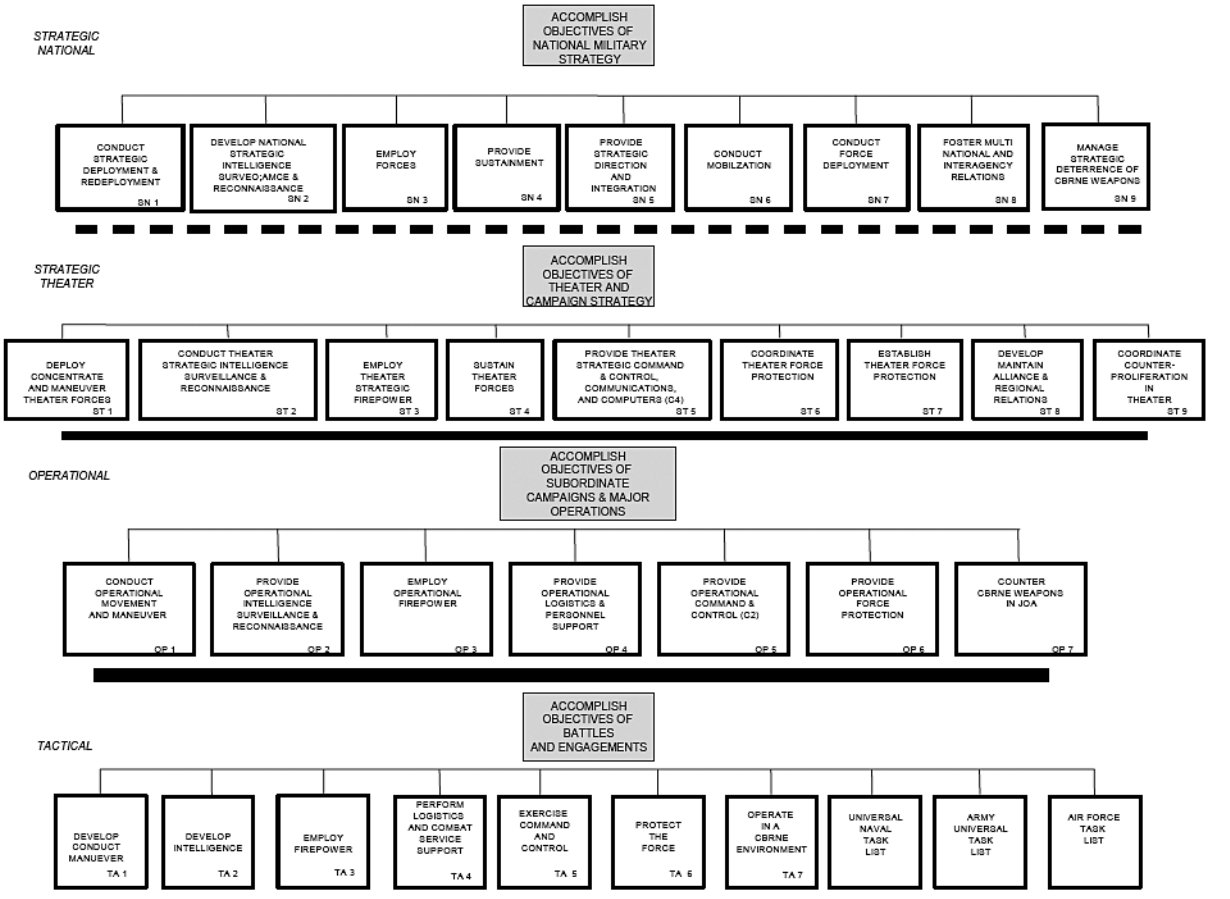

Figure 4. War as hierarchy.

oversimplified) implications of applied science's empirical methodology. The indoctrinated practitioner has taken these implications to extrapolate further and produce extreme analytical diversification (and rendering a wholly factitious genera and species). This diversification is common; doctrinal artifacts such as the table at Figure 4 demonstrate this. The table, taken from Chairman of the Joint Chiefs of Staff Manual (CJCSM) *Universal Joint Task List* (CJSCM 3500.04, 1 July 2002), demonstrates graphically how a metaphor associated with a hierarchy can enhance further objectification by this science-like categorization of military discourse.

This diagram possesses further diversified layers of sub-tasks under these tasks later in the manual. It represents an architectural engineering metaphor of warfare that may be counterproductive by promoting the reification of its categories.

Armed with the framework for deciphering types, reflective military practitioners can evaluate such a metaphor's efficacy. Instead of an architectural-level analogy of tactics-operations-strategy (similar to an organization's "block and wire" diagram signifying most important to least important), the reflective professional can perhaps examine war with a more nontraditional and more aesthetic metaphor borrowed from the humanities and fine arts—through interpretive narratives or creative processes like painting, composing music, poetry, and so on. For example, should generals "orchestrate" operations like conductors, or should they be more like jazz musicians who allow the music to flow more freely, permitting other members of the band to assume the "lead" where it feels right? The same critical reasoning can reflect on other cases of Newtonian metaphor still used in modern military discourse. Examples for scrutiny might be "culminating point," "decisive point," "friction," "control measures," "center of gravity," and so on.

In an unpublished manuscript, two researchers, Mary Jo Hatch and Dvora Yano, propose that painting can offer rich metaphor to stir new imaginations and possibilities when it comes to dealing with ambiguity:

> Our metaphorical use of painting . . . adds an aesthetic channel for communicating about [differences in how we make sense]. Used as a supplement to verbal argumentation, the visual, artistic material opens the discourse . . . not only to other avenues of understanding complex philosophical ideas, but also to greater aesthetic appreciation of its phenomena and to acts of theorizing about them.[18]

Military practitioners often hear from thought leaders about the "art of war," or the "operational art," yet where is reflection on the aspects of this metaphor encouraged in professional military education and self-development?

Note how the following description employs both Newtonian (machinelike) and Post-Newtonian (complicated, holistic) patterns to indicate the need for adjustments when working in the interagency:

> The DOD is like clocks and the interagency is like clouds. Clocks operate in an orderly way. The actions of each component are predictable from the other, synchronized, and unified. The interagency is more like clouds. Clouds lack the orderliness of clocks. Clouds change form, grow and shrink, and are strongly affected by environmental conditions. The movement of molecules and particles making up a cloud are nearly impossible to predict precisely. The interagency is highly responsive to contextual influences while absent neat orderliness. Just as understanding some of its "molecules and particles" does not give us an understanding of the entire cloud, so do we fail to appreciate the nature of the National Security Council, Departments of State, Justice, Homeland Security, etc. or an interagency working group when we focus only on its elemental members. The actions and attributes of one group member do not accurately predict another's. The behavior of the interagency does not unfold like clockwork. Rather, variation is the rule.[19]

Notice also how the eloquence of my short paragraph can convey a richness of meaning about the cultural peculiarities of interorganizational relations. In lieu of managing the military body of knowledge as one would an applied science, perhaps military practitioners should, as University of Michigan Professor Karl E. Weick suggests, learn to manage the eloquence of meaning as inherent to professional development.[20]

Unreflective indoctrination can… seductively serve to reduce anxiety and confusion while encouraging complacency about knowledge.

Conclusion

Thought leaders' sense-givings are so prevalent that it is easy to mindlessly treat a metaphor as a certain "truth" rather than as a shadowy image for communicating only dimly perceived realities. Unawareness of metaphor can grow and work to anesthetize professionals from feeling and understanding the implications of truth as it is socially constructed into a makeshift correspondence with fact. Unreflective indoctrination can thereby seductively serve to reduce anxiety and confusion while encouraging complacency about knowledge. In uncritical practitioners not tuned to reflection, a leader's over-simplified representations of truths can be crippling. Given a framework for evaluating metaphors, the reflective military practitioner can adjust to the ambiguity prevalent in complex operational environments. This discussion and its proposed framework seek to promote the post-positivist logic that has been suppressed (and often stigmatized) by a long-standing façade of logical positivism in military doctrine. Professional debate about whether prevailing operational metaphors can be appropriately modified, diminished in use, or wholly discarded is needed. Some other form of sensemaking that works better to convey complexity and emergence as shared meaning is required. Barring such reflection, professionals may easily become too comfortable by following the influence of inappropriate thought-leader metaphors and fail to employ their own imaginative rationality.

This essay has proposed a framework that can assist in needed reflection and help professionals decipher whether specific metaphors are imaginative enough. The mindless tyranny of defunct metaphors in Western military knowledge has already proven its liabilities. Mindfulness of the inherent potential for such domination can serve to motivate imaginative ways to explore breakthrough sensemakings. Such reflection could lead to inventions of breathtakingly rich eloquence in postmodern military discourse. ***MR***

NOTES

1. George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: University of Chicago Press, 1980) 193.

2. Hence, the common metaphor of "worldview." Several prominent social psychologists, such as Karl E. Weick (University of Michigan) have studied the concept of sensemaking. Paraphrasing his and others' work, sensemaking is using, modifying, rejecting and creating new paradigms or mental models when dealing with situations of incoherency and disorderliness. Is this not the work of thought leaders when they employ metaphoric reasoning? See Karl E. Weick, *Sensemaking in Organizations* (Thousand Oaks, CA: Sage, 1995).

3. I synthesized this list from the ideas of multiple writers in Andrew Ortony, ed, *Metaphor and Thought*, 2d ed. (Cambridge, MA: Cambridge University Press, 1993).

4. Alexandr A. Svechin, *Strategy*, 2d ed.,original published in 1927 (Minneapolis, Minnesota: 1991), 74.

5. David Galula, *Counterinsurgency: Theory and Practice* (New York: Praeger, 1964) 12.

6. General Peter J. Schoomaker's remarks at the Association of the US Army convention, 4 March 2004, <www.ausa.org/webpub/DeptHome.nsf/byid/CTON-6FUSYZ> (25 May 2007).

7. General Peter Pace, Chairman of the Joint Chiefs of Staff, National Press Club Luncheon, Washington, DC, 17 February 2006, <www.jcs.mil/chairman/speeches/060217NatPressClubLunch.html> (28 May 2007).

8. These remarks (quoted in Army Field Manual FM 3-0, *Operations*, February 2008, 1-1) were originally delivered in a speech by Secretary of Defense Robert M. Gates, Manhattan, Kansas, 26 November 2007.

9. Kenneth E. Boulding, *The Image: Knowledge in Life and Society* (Ann Arbor, MI: University of Michigan, 1971), 148. Boulding suggests that continuous development of general-purpose metaphors for sensemaking, especially those borrowed from the natural sciences, should constitute an entirely new field of study he calls "eiconics." He used "general systems theory" for his case study of how systems theory can be applied as a biological metaphor to explaining the nature of human social systems. For an excellent critique of how almost two centuries of metaphoric reasoning has led to a distorted and biased view of the field of sociology, see John Hassard, *Sociology and Organization Theory: Positivism, Paradigms, and Postmodernity* (Cambridge, UK: Cambridge University, 1993).

10. Chairman of the Joint Chiefs of Staff, *Capstone Concept for Joint Operations*, Version 2.0. <www.dtic.mil/futurejointwarfare/concepts/approved_ccjov2.pdf>.

11. Chairman of the Joint Chiefs of Staff, Joint Publication 5-0, *Joint Operation Planning*, <www.dtic.mil/doctrine/jel/new_pubs/jp5_0.pdf>.

12. T. Irene Sanders and Judith A. McCabe, *The Use of Complexity Science: A Survey of Federal Departments and Agencies, Private Foundations, Universities and Independent Education and Research Centers*, Washington, DC: Washington Center for Complexity and Public Policy, October 2003, 12, <www.hcs.ucla.edu/DoEreport.pdf> (23 May 2007).

13. Richard N. Haass, "The Bush Administration's Response to September 11th—and Beyond" (remarks to the Council of Foreign Relations New York, NY October 15, 2001).

14. Dana Milbank, "At GOP Convention, Echoes of Sept. 11," *The Washington Post*, 30 August 2004, A01.

15. Chris Matthews, "Ronald Reagan Was a Political Warrior and Hero: The Actor Who Had Spent Decades Playing Heroes Transcended the Back Lot and Its Illusions, <www.msnbc.msn.com/id/5146472/> (28 May 2007).

16. Donald H. Rumsfeld (speech delivered at the award ceremony for James "Jimmy" Doolittle, Hudson Institute, Washington, DC, May 13 2003), <www.defenselink.mil/speeches/speech.aspx?speechid=401> (3 May 2007).

17. Schoomaker.

18. Mary Jo Hatch and Dvora Yanow, *Methodology by Metaphor: Ways of Seeing in Painting and Research*, unpublished manuscript, October 2007.

19. The Interagency images of clockwork and clouds were adapted by the author based on ideas presented by Richard A. Guzzo and Gregory Shea, "Group Performance and Intergroup Relations in Organizations," in Marvin D. Dunnette and Leaetta M. Hough, eds., *Handbook for Industrial and Organizational Psychology*, vol. 13, 2d ed. (Palo Alto, CA: Consulting Psychologists, 1992), 273.

20. Karl E. Weick, "The Management of Eloquence," in David R. Hampton, Charles E. Sumner, and Ross A. Webber, *Organizational Behavior and the Practice of Management*, 5th ed. (Glenview, IL: Scott Foresman and Company, 1980), 581.

SOCIOCULTURAL EXPERTISE AND THE MILITARY: Beyond the Controversy

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The views expressed herein are those of the author and do not necessarily represent the views of the 4th Psychological Operations Group, the U.S. Army, or the Department of Defense.

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PHOTO: A civilian interpreter with a tactical psychological operations team asks a local Iraqi civilian for directions to the nearest fish farm in Haswah, Iraq, 23 March 2008. (DOD, SPC Tiffany Dusterhoft)

OVER THE LAST SEVERAL YEARS, a growing number of military planners and strategists have expressed concern that success in 21st-century warfare increasingly will depend on the U.S. military's ability to acquire and skillfully use sociocultural expertise.[1] Although a small number of units already provide sociocultural research and analysis to military operations (for example the Strategic Studies Detachment of the 4th Psychological Operations [PSYOP] Group [4POG], the Marine Corps Intelligence Activity, or the Human Factors Group of the Defense Intelligence Agency), no initiative has been as aggressive or arguably as innovative in its attempt to rapidly deliver sociocultural expertise to the battlefield as has the human terrain system (HTS).[2] With feature stories in major daily newspapers and on nationally broadcast radio programs, HTS has brought renewed attention to the need for sociocultural expertise in military operations and planning and has sparked a considerable degree of debate about the relationship between the social sciences and the military.

The debate about the military's use of sociocultural expertise presents an ideal opportunity to address the role of civilian and military cooperation in security affairs. Such issues have been, however, almost completely absent from the debate so far. Instead, the rhetoric in this debate often rapidly disintegrates into a polarized polemic that is often as unenlightening as it is nasty. My intention in this article is to translate the controversy about the use of sociocultural expertise into terms that military commanders can appreciate, and to differentiate the legitimate methodological considerations that the controversy highlights from those concerns that may be somewhat overstated. Ultimately, I suggest that the best way to acknowledge the challenges raised by the controversy and to tackle the military's sociocultural shortfall may very well be to actively pursue the blurring of boundaries between the spheres of military operations and civilian academic scholarship.

Sociocultural Expertise: What is it, and where does it come from?

To begin to unpack some of the academic anxiety about the military's interest in sociocultural expertise, it would help military commanders first to understand some of the techniques that social science researchers use to learn about other cultures and societies. Press coverage of the controversy surrounding the military's desire for greater sociocultural expertise seems to instinctively use the term "anthropologists" as a stand-in for the more general category of "civilian academics who produce cultural knowledge."

While the shorthand is understandable, it is not entirely accurate.

Numerous academic disciplines lay claim to the production of knowledge about other cultures and societies; today, anthropology is far from having a corner on the market. While disciplines such as anthropology and sociology are still staples of social science education and training, for at least the last 20 years graduate students have earned doctorates from newer, interdisciplinary departments and programs of social and cultural studies. In the academic arena, few today would question that producers of cultural knowledge can also be trained in interdisciplinary fields such as literary studies, communications and media studies, religious studies, rural sociology and geography, or in area studies programs, such as African studies, Middle Eastern studies, or Asian studies.

One of the best methods available to social science researchers to gain cultural knowledge is ethnographic fieldwork—traveling to a site, spending an extended period of time in residence there, and using specific techniques to learn about how people there behave and why.[3] Many people are familiar with the experience of living in a sociocultural milieu distinct from the one in which they grew up or encountering a group of people with a set of norms and behaviors different from their own. Being a tourist or a new member to a group often gives someone the analytic distance necessary to question the unspoken rules of that new community. However, ethnographic fieldwork is not as simple as living abroad or being a stranger. It is rather a deliberate effort to teach yourself to see the world through someone else's eyes. In most cases, that turns out to be a full time job in itself.

By learning the local language and building rapport with key members of the local community, the ethnographic researcher is able to gain entry into that community and to observe how people go about their everyday business in their "natural" habitat. Notes from these observations are typically transcribed into field journals on a daily basis and then coded and analyzed to assess patterns of behavior. Combining this data with formal and informal interviews of key informants and exhaustive reviews of the existing literature on a subject, the researcher is able to assess the underlining meaning of those behaviors and is able ultimately to gain a tacit understanding of "what makes that group tick." Unlike being a tourist or simply working in an embassy overseas, fieldwork involves embedding oneself in the local environment and objectifying one's day-to-day experience, usually by writing about it extensively and in great descriptive detail. Without this objectification process, a traveler would likely only filter what he sees and hears through preconceptions that he walked in with. Rather than cultural insight, the outcome would more often be reinforced stereotypes.

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What Ethnography Can Bring to the Military

It has been pointed out elsewhere that ethnographic information can be used to discern the fundamental structures into which a society may organize itself and that knowledge of these social structures can be used to plan more effective military responses to unconventional foes—for example, terrorist groups that rely on kinship relationships to sustain their operational networks.[4] However, the ability to perceive and thereby to penetrate the social organization of enemy combatants is not the only insight that military commanders and warfighters can gain from sociocultural research and analysis. Some additional capabilities that the military can gain by reaching out to ethnographic fieldwork include the ability to differentiate the ubiquitous from the abnormal in another sociocultural milieu, an understanding of the role of identity in fueling conflict, and fluency in alternative explanatory frameworks and narratives.

The ability to recognize somebody else's "everyday." Since coming to Fort Bragg in 2005, I have deployed numerous times in my capacity as a sociocultural analyst and research specialist, and each time, I was reminded of just how much of a bubble American ex-pats and Soldiers are in when they are stationed overseas. Having done extensive

fieldwork in Africa as an academic researcher before coming to Fort Bragg, I am well aware of the daily life and experiences that "official Americans" miss by virtue of this status, but those who have never done ethnographic fieldwork often are not even aware of the realities that they are missing out on. When I was conducting fieldwork for my dissertation in Senegal, for example, I was once asked by an economics officer from the U.S. Embassy (who had been living in Senegal considerably longer than I had been at that point) who "all these little kids in the street with the tomato paste cans" were. The kids were supposed to be Quranic school students, but in reality, they were child beggars. In pre-colonial West Africa, itinerant clerics (or *marabouts*) would set up Quaranic schools in a village, taking full charge of the students, or *talibes*, for several months at a time. To earn their keep and to learn humility, the students would go house-to-house carrying calabash bowls begging for food. In the modern era, the system has become an organized, exploitive racket. Kids from rural communities are often sent to the cities to get what their parents think is a Quranic education at the feet of a marabout, but when the children get to the city, instead of learning the Quran from the marabout, the talibes spend most of their day in his service begging for money. Instead of a calabash, today talibes carry the large empty cans of tomato paste so essential to Senegalese cuisine. When the economics officer asked me who these kids were, I was living with a Senegalese host family (rather than in a gated embassy compound, as he was), and at my house and throughout our neighborhood, talibes still visited nightly to collect leftovers from the evening meal. I had learned in less than a week of living in Senegal who the kids were and what they were up to. In fact, talibes were such a standard fixture of daily life in Senegal that it was hard for me to imagine how anyone, especially someone so knowledgeable about the Senegalese economy, could really describe himself as "living in Senegal" and not know who "the kids with the tomato paste cans" were.

To be fair to the diplomat and to other kinds of official personnel who live in an ex-pat bubble when overseas, "official Americans" simply cannot get as far "out of the net" as independent scholars can. Security concerns and the requirement to avoid "going native" currently make it all but impossible to do what the ethnographic researcher is trained to do, which is to immerse him or herself in the life of another culture, to ask knowledgeable insiders questions about what he or she is seeing, and thereby to learn to distinguish the everyday from the unusual in the sociocultural landscape. In my own experience, I have seen many capable special operations Soldiers take on this participant-observer role almost instinctively, but also quickly max-out the training that they received in endeavoring to do so. Today, even their efforts are ad hoc at best. Learning about other cultures and societies while deployed overseas is simply not sufficiently prioritized as a requirement, even within the special operations community, for anything like "participant observation" to have become embedded as standard operating procedure.[5]

An understanding of the role of identity in fueling conflict. Another kind of insight that one can gain from ethnographic fieldwork is the realization that "who people are" is often the least obvious question one can answer about another community. The complications of the identity question usually compound in contexts of conflict. Concepts of race and identity in the Sahel region illustrate the point. For example, in Wolof, which is the lingua franca of Senegal, the word *tubaab* means "French person," but colloquially the term means "white person" more broadly. Membership in the category of tubaab, however, is determined less by skin color (as Americans would probably assume) than by one's behavior, and especially by the use of language. African-American travelers to Senegal are frequently also designated "tubaab" if they do not speak Wolof. In other parts of the Sahel, for example in Mauritania and Mali, the word "Arab" can have a variety of meanings, and only one bears any resemblance to what we usually mean by "Arab." In many cases, being an "Arab" can have more to do with your social status (e.g. your family name is considered to belong to a "warrior class") than it does with the color of your skin, your ethno-racial make-up, or your geo-strategic location. Being "Arab" in this context is performative; different communities at different times have tried to lay claim to "Arab" identity for sociopolitical reasons.[6]

Another example of a highly contested identity in the Sahel is the category *Tuareg*. Tuareg people are considered Berber peoples in ethno-linguistic

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scholarship, but both pan-Arabist voices and North African Berber nationalist movements have at various times tried to lay claim to Tuareg people as "one of their own."[7] Tuareg themselves have at different times and in shifting political contexts identified themselves as Arab, *Kel Tamashek* ("speakers of Tamashek"), and "people of the Sahara."[8] In other words, there is nothing obvious or given about categories like "white," "black," "Arab," or even "Tuareg" in an area as historically disputed as is the Sahara. Intelligence analyses often deal with racial and identity categories such as these as self-evident black boxes, a practice that, while understandable given time constraints and other priorities, undoubtedly leads to inaccuracies and errors. This is likely even more so the case in the context of insurgencies, in which identity itself is often precisely what is being contested. While one can study the meaning of different racial and identity categories by reading the research of others, the full range and complexity of such concepts is difficult to master any other way than by conducting some kind of ethnographic fieldwork.

Fluency in alternative explanatory frameworks and narratives. One of the most powerful kinds of insights that one can gain from ethnographic fieldwork is an understanding of the rhetorical resources and shared narratives that people use to make sense of their world. The empirical discovery of just how radically different the "normal" and the "sensible" can be to different groups of people can be shocking. When I arrived in Senegal soon after 9/11, for example, local people often asked me "what did you think when you saw the World Trade Center bombing?" Instead of answering, I often turned the question back on my interlocutors. "Well, what did you think about it?" I would ask. Most would immediately exclaim that they found the events to be horrible and "*incroyable*," but nevertheless, expressed some scepticism that Osama Bin Laden was in fact the culprit. "If you really think about it," they would say, "is it even possible for one guy in a cave to have done all that? America is big and powerful. So whoever did this must be big and powerful too, right?" "Well, who did you have in mind?" I would ask. Their answer? Al Gore.

The first time I heard this response I was perplexed and surprised, dismissing the respondents as seemingly rational, yet slightly unbalanced, conspiracy theorists. However, I gradually started to hear the same explanation from a number of different people, from university-educated professionals to taxi drivers. The story went like this: Al Gore, apparently angry that George W. Bush had stolen the election in 2000, crashed the planes into the Twin Towers and into the Pentagon as part of an attempt to overthrow President Bush in a coup d'etat. While this was not necessarily a widely held view, it was certainly an account circulating in Senegalese popular imagination at the time—and one that at least some found plausible.

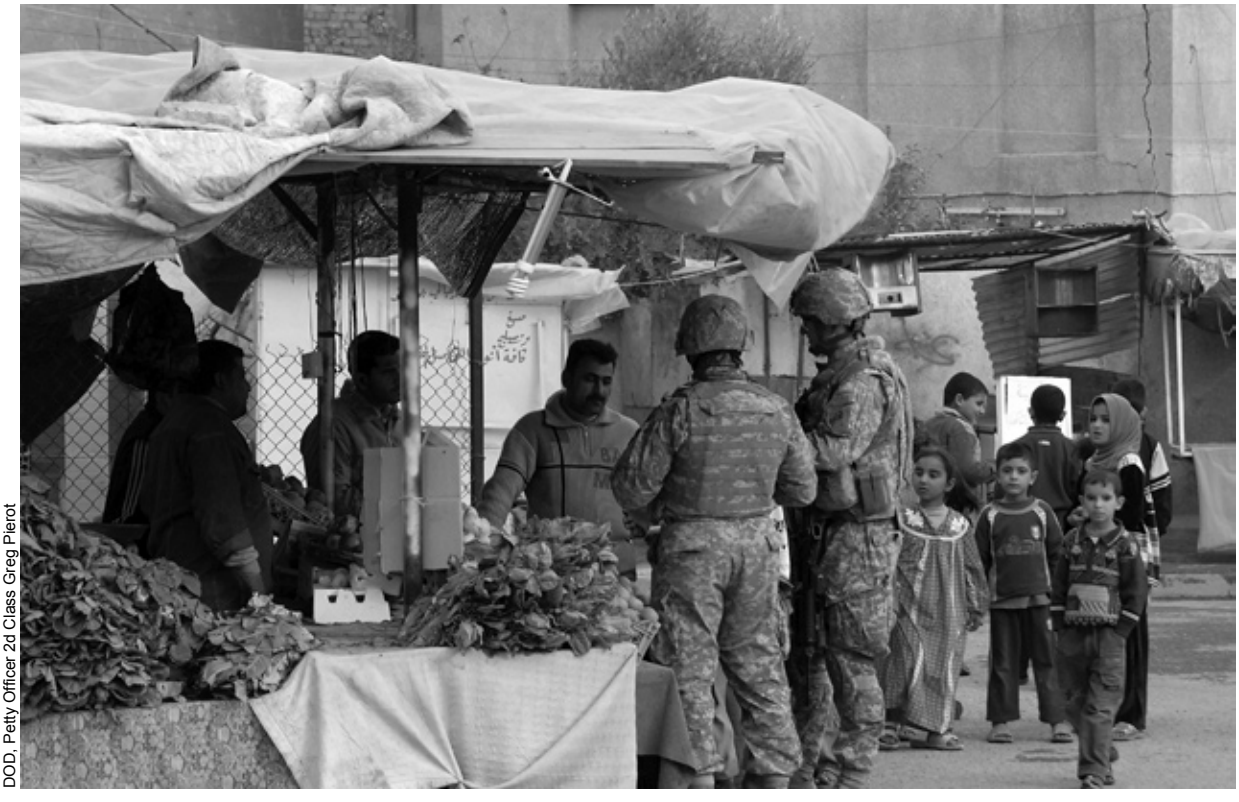
PSYOP planners and strategic communications specialists might hear in this story evidence of an enemy information operations (IO) or PSYOP campaign. While understandably instrumental in simplifying a complex situation, reducing such phenomena to "enemy IO/PSYOP" can precipitate a misfire in our response. Instead, reading these phenomena through the lens of deep sociocultural understanding enables a far more prescient and on-target counter. No enemy IO can manufacture the sociocultural logic that makes it possible for "an attempted coup" to stick as the explanation for 9/11. That logic is entirely indigenous. Although Senegal has been blessed with a relatively well-functioning democracy since Independence in 1960, civil wars and coup d'etats are very much a facet of the West African political culture of which Senegal is a part. From the Senegalese perspective, if America was having contested elections (just as they themselves have frequently experienced), then why should an attempted coup d'etat in America be so far-fetched either? Some of the most unstable places in the world, and the places where we will most likely be forced to intervene in the 21st century, are precisely those developing nations where people are coming of age and living out their lives in political universes

that are radically distinct from our own. It is hard to see how we can possibly understand those peoples' points of view, let alone attempt to change them, without cultivating and institutionalizing some version of ethnography-based research as a part of our national security tool kit.

In short, sociocultural research—and in particular ethnographic fieldwork—can bring to the national security tool kit a raw "feeling" for a place, a time, and a group of people. Arguably, no other academic enterprise has the pretense or potential to provide the same level of insight into the behavior and worldviews of other societies. In many ways, however, this intangible, tacit characteristic of sociocultural expertise makes it comparatively unwieldy to harness as an instrument of strategic planning and military operations. Ethnographic research is in part more unwieldy than other forms of area research because achieving this level of tacit understanding often requires establishing a degree of trust with members of the local community who can serve as ethnographic informants. And it is in large part because they fear that such relationships of trust between ethnographers and local informants will be betrayed that some academics are alarmed to learn that the military is attempting to mobilize ethnographic resources for its own purposes.[9]

So what is the controversy? And should military commanders care? While the human terrain teams in Iraq and Afghanistan have garnered the lion's share of academic critique to date, some of the more sweeping generalizations about the dangers of "militarized social science" leave little doubt that it is not the HTS initiative alone that animates the academic consternation.[10] Some of this academic apprehension undoubtedly originates in the contentious history of the use of social science by the U.S. military and intelligence agencies during the Vietnam era.[11] The contentiousness of this history itself, however, suggests that more than one response is available to that past.

Given this history, some may find it safer for the academy to unilaterally reject any kind of relationship between the academic social sciences and the military. But those of us who provide, or who want to provide, sociocultural expertise to the military should instead take stock of the lessons from history and endeavor to do it better this time. One first step



DOD, Petty Officer 2d Class Greg Pierot

U.S. Army SSG Stephen McDowell, working with a tactical PSYOP company, speaks to local Iraqis, Baghdad, Iraq, 18 February 2008.

in this direction is to acknowledge the legitimate challenges raised by concerned academics, recognizing that there may be areas of tension—and even incompatibility—between the methodological requirements of social science research (in particular, ethnographic fieldwork) and the exigencies of military operations.[12] Some of the major methodological challenges raised by concerned scholars are the issues of voluntary participation by research subjects and the lack of academic oversight in research conducted for the military.

Voluntary Participation

Some concerned scholars have questioned whether informed consent is possible and whether the safety of research informants can be ensured in the context of armed conflict. In such contexts, these scholars suggest, local people may feel that researchers embedded with U.S. military units can exert power over them and may therefore feel forced to participate in research. Civilian researchers that are wearing military uniforms or carrying arms could exacerbate such feelings of coercion, thereby skewing the accuracy of the ethnographic data collected. Ethnographic fieldwork has a built-in "check" that this concern overlooks; however, rapport cannot be coerced. Those who have conducted face-to-face research know that the best data usually come not from participants who feel obliged to participate but rather from those who want to participate. For a well-trained ethnographic researcher, the bottom line should be simple: if carrying a gun or wearing a uniform interferes with a researcher's ability to build rapport with local informants, then these conditions will likewise frame and limit the data that a researcher ultimately walks away with.[13]

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My own experiences suggest that the general concern over "coercion" may be somewhat overstated. Arriving to an interview as a "white person" in an automobile with diplomatic plates, for example, leaves your interlocutors little doubt about whom they are talking to. No matter who else you might be, to them you are first and foremost an "official American;" local people will convey their views not to a "neutral researcher" but to a representative of the U.S. government. Far from being fearful of the consequences of such engagement, many people in the parts of the world in which I travel are instead willing and exceptionally eager to convey their views through such a channel.[14] After all, it is not every day that a U.S. government official bothers to visit a rural community, to talk to representatives from local non-government organizations, or to spend the day with a collection of students walking through their world. While there may be risks associated with talking to official Americans, local people may feel far more risk in the possibility of never getting the chance. Of course, it is naïve to believe that such interlocutors will forget about your "official" status and confide unvarnished truths to you. But holding out for such a possibility misses the point. Precisely by listening against the grain of these stories to hear what local people want "official Americans" to hear, we learn about their views of the world and of the United States. The challenge for the sociocultural researcher working for the military is not to create some kind of "pure" ethnographic environment, but rather to be doggedly self-reflective about the conditions in which this sociocultural data are collected and to be rigorous in qualifying the analyses that are ultimately made from this data.

Lack of Academic Oversight

Another substantive point raised by some concerned scholars is the issue of secrecy and the limitations that may be imposed on the publication of ethnographic research conducted for or by the military. Many question the academic integrity of research findings if those findings are only circulated in classified channels. As these scholars might point out, part of what moves ethnographic observation beyond mere subjective musings and grounds its findings in objectivity is the regular practice of sharing one's analysis with colleagues. In so doing,

researchers verify and corroborate what they think they are seeing in the field. This process, called peer review, typically involves at a minimum presenting papers at professional society meetings and publishing studies in journals with rigorous reviewing processes. Peer review is not only the means that scholars use to stay abreast of the latest findings in their respective fields, but it is also how academics assess the relative capabilities and expertise of their colleagues. Military requirements can make continued participation in this kind of peer review process challenging if not impossible.

The challenge here for sociocultural researchers working for the military is not so much with classification (since only references to operational activity need to be redacted), but rather that there is a fundamental divergence between the needs and priorities of sociocultural research conducted for the military and that conducted in a university context. The structure of knowledge production in the academic environment of a university is more like a distributed network: typically, no single center monopolizes authority, rather multiple communities compete with each other (as "schools of thought" on a subject, for example). The structure of knowledge production in the military, as well as in the intelligence community more broadly, is instead far more vertically organized and hierarchically oriented. What commanders are looking for is a single authoritative voice on a problem, not a cacophony of competing views (even if the latter is still often what they get). In practice, this often means that rather than making an original contribution to a field of study, sociocultural researchers and analysts working in a military context often find themselves instead summarizing the state of academic understanding on a given topic for an educated lay audience. Our goal is typically not to stake out a new and daring position on a subject among a field of experts (as it would be in the academic arena), but rather to address concerns of immediate relevance to military planners and operators in as timely a manner as possible. These operational priorities cannot absolve the need for academic rigor, however. Without some way to loop sociocultural research back into academic channels, military planners risk putting too much faith in the untested assumptions of their sociocultural researchers and of putting on a pedestal "academic expertise" that is no longer truly tested as such.

Without some way to loop sociocultural research back into academic channels, military planners risk putting too much faith in… untested assumptions…

The structural differences inherent to producing knowledge in an academic as opposed to an operational environment will vex any effort to institutionalize sociocultural expertise within the military. The scale of the challenge is hardly a satisfactory reason to not try, however.[15]

There Are Gray Areas

As the above has suggested, some of the issues raised by concerned scholars highlight legitimate challenges entailed in incorporating sociocultural research and analysis into military operations. However, some scholars have weakened their claims about the risks entailed in the military's use of social science by drawing too stark a line between the challenges of working for the military and the challenges of working for any other social institution. In other words, many of the concerns they raise are gray areas for university-based academics themselves. Ethnographic fieldwork in some ways is inherently deceptive as far as the researcher's goal is to integrate him or herself into a community in such a way that people will go about their usual business so that the researcher can observe their "normal behavior."[16] As a result, questions about betraying the trust of informants are in some sense already germane to the production of cultural knowledge. They are not concerns that arise exclusively from doing this work for the military. Furthermore, despite the guiding principle to "do no harm," no scholar can ever know for certain the uses to which his or her work will be put. Even informants in non-conflict settings can potentially be harmed by poorly conducted social science research.[17] For example, studies of workplace practices can precipitate the dismissal of employees, and studies of criminal behavior may render research subjects more vulnerable to apprehension by law enforcement. Scholars are never simply mouthpieces for

the communities they study. Instead, they frame and reinterpret what their informants tell them. In doing so, there is always potential for conflict between the interests of the scholar and the interests of his or her research subjects.

To manage such risks, academic researchers have created institutional review boards and human subject research committees on university campuses. The job of these committees is to review human subject research proposals and to provide oversight of research that involves human subjects. In this case, the academic concern to "do no harm" highlights another component of social science research that can be honed to ultimately improve the quality of the sociocultural research being produced for the military. Nothing precludes the Department of Defense (DOD) from organizing and managing its own institutional review boards or from ensuring that research conducted for the DOD subscribes to common regulations of federally funded research.[18] Because institutional review boards were principally designed to provide oversight on biomedical and laboratory science, there has always been some tension between the requirements of such review boards and the methods of social science research, in particular ethnography-based methods. But there seems to be no clear reason why scholars who work for the military ought to be held to a higher (or lower) standard than are their university-based colleagues with respect to such issues.

The Civilian-Military Gap

Ultimately, much of the controversy surrounding the military's interest in sociocultural expertise highlights the tremendous chasm that exists between the broad strokes of academic theorizing and the everyday workings of the military. Let's face it—very few university professors in social and cultural studies fields have any real exposure to members of the U.S. Armed Forces. They may on occasion have ROTC students in their classes, but they probably have never met a private first class, a staff sergeant, a captain, or even a colonel for that matter. In the absence of relationships with real people, it is easy to substitute fantasy and fear for reality.

When I first came to Fort Bragg, I myself was not sure of what to expect. I imagined that soldiers might be confused or frustrated by my attempt to complicate their worldviews and operational plans, and that I would have to fight hard to make my contributions heard. Nothing has ended up being further from the case. The soldiers and officers that I have worked with have soaked up my analytic soliloquies and have almost uniformly been excited and eager to bring me on as a member of their team. In the process, they have taught me invaluable lessons about teamwork and camaraderie, leadership and management, and above all humility, things which the competitive and individualistic environment of graduate school frankly did not provide much training in.

While there is little time for intellectualism for its own sake at a place like Fort Bragg, the palpable energy and earnestness that soldiers there bring to the task of learning is both infectious and inspiring. As ironic as it is, making the transition from teaching at a university to working as a sociocultural analyst and researcher on a military base has made me reevaluate and appreciate again the purposefulness of scholarship.

From the military member's perspective, some of the anxieties that concerned scholars raise suggest a profound misunderstanding of the range of activities that military members perform. Some claim that sociocultural knowledge can be used to reduce indiscriminate kinetic action. Others believe this claim only white-washes the military's "real" interest in sociocultural knowledge. On blogs and internet chat forums devoted to this debate, some have stipulated that the "purpose" of the military is "to kill." According to this reasoning, by definition, the purpose of anything that enables the military to do its job must be to make lethal action more efficient or more effective. From the military commander's perspective, this reasoning likely appears to be an almost comical over-simplification of the full range of security-related activities in which the military engages, and it completely ignores those military operations whose purpose is actually to avoid killing or to bring violence to an end.[19]

For instance, PSYOP and civil affairs missions are designed to support non-kinetic irregular warfare in order to secure long-term advantage with civilian populations. These are precisely the military units for which sociocultural knowledge is perhaps most critical and for which lethal action is

U.S. Air Force, MSGT Steve Cline

U.S. Army Civil Affairs and Psychological Operations Command's CPT Rundgren, right, helps an Ethiopian volunteer carry supplies during a Combined Joint Task Force-Horn of Africa exercise in Boren Jeden, Ethiopia, 5 May 2008.

very often counter-productive. Because concerned scholars ignore the complexity and breadth of military operations such as these, their concerns are frequently dismissed as irrelevant within the armed services.

At the same time, military members' lack of exposure to civilian postgraduate education means they often misunderstand the motives of such academic critique as purely political in nature. There seems little doubt that some of the critique (of HTS in particular) is indeed a thinly veiled protest of the war in Iraq.[20] But the more substantive aspects of the critique are instead motivated by the perfectly logical desire for proprietary self-preservation. Military commanders often may not realize that it is precisely the charge of the academic to reproduce his discipline, first by training younger scholars to take his or her place, and second by policing the boundaries of the discipline. The professional world of social and cultural-studies scholars is extraordinarily competitive, and pretenders to disciplinary titles are routinely submitted to intense scrutiny and "cast out" by their peers and mentors if they do not "make the cut."

Because concerned scholars ignore the complexity and breadth of military operations…, their concerns are frequently dismissed as irrelevant within the armed services.

While academics may be particularly worried about the intentions of the military, analysts who work for the military are differentiated from the academic community as "practitioners" rather than included in it as scholarly members. To survive in this academic environment, young scholars are typically groomed to harbor an intense sense of defensive individualism; rarely are they afforded the luxury of collaborative teamwork. Unfortunately, such norms of competitiveness and boundary-drawing often only "prove" to military members that the "ivory tower" is in fact petty and parochial.

In addition, most press coverage of the debate about sociocultural expertise and the military has been devoted to screeds and unilateral condemnations from the academic community, fueling negative stereotypes of civilian academics as arrogant, patronizing, and self-righteously indignant. As a result, some military commanders may feel even more inclined to do away with the whole onerous hassle of dealing with "civilian academic types" at all. I would contend, however, that there is a real need to take the controversy seriously as a first step in moving past it. There is simply too much at stake to capitulate to academic censure or cross-institutional misunderstanding.

Blurring the Boundaries, Building Better Security

Given the angst-filled controversy among civilian academics, some military planners may feel that it would be easier to find some internal solutions to its deficit of sociocultural expertise. A variety of authors have suggested several internal solutions that might be considered. For example, one suggestion is to train a corps of troops specifically dedicated to collecting ethnographic information, thus avoiding the tendency simply to add another task to the soldier's "to do" list while at the same time enabling the military to respond to its own shifting area needs.[21] While no military occupational specialty currently trains soldiers or officers to conduct ethnographic fieldwork, building up the foreign area officer (FAO) program could constitute a promising intermediate step, especially if force protection restrictions are moderately lifted and an effort is made to engage civilian foreign nationals, not just members of foreign militaries.[22]

Another step that has been suggested is to encourage officers to pursue advanced study in social, cultural, and area studies at civilian universities in lieu of, or in addition to, command and general staff curriculums at military universities.[23] Advanced study and postgraduate work at civilian universities would familiarize military leaders with the demands of rigorous social science research and analysis (such as peer review) and would better enable them to recognize substantive sociocultural analysis and its value for military operations. Opportunities for cross talk between civilian academia and the military can also be augmented by funding research through scholarships, language study, and study abroad.

Finally, adding faculty positions for social scientists and cultural studies specialists at war colleges and military universities would work to constructively blur the divide. In particular, such faculty positions would facilitate institutional bridge building that could better address the challenges of producing rigorous sociocultural analyses within the military environment (for example, by providing an institutional home for human subject research committees). Even if all of these measures were undertaken, however, internal solutions to the military's sociocultural deficit problem are on their own likely to prove inadequate.

There are a number of reasons why civilians inside and outside the Department of Defense must continue to be part of the solution to the military's sociocultural deficit problem.

First, the training involved to produce quality ethnographic researchers is extensive, usually requiring anywhere from five to eight years of focused study in languages, area orientation, and social and cultural theory. During this training, future ethnographic researchers learn how to assess the strengths and weaknesses of sociocultural analyses, especially those concerning the assumptions and framings that unavoidably underpin any interpretation of culture. Time constraints and budgetary realities alone would preclude the possibility of educating enough "school-trained" social scientists and cultural experts within the armed forces to support all potential operations.

Second, military members are first and foremost soldiers, not scholars. While their operational planning and campaigns will no doubt be improved by a comprehension of the sociocultural terrain, understanding that terrain is only one among many priorities that they must manage. Understanding that terrain is, on the other hand, the primary objective of sociocultural researchers and analysts, and their professional success can be made to depend largely upon the quality and value of the research that they produce.

Finally, civilian researchers and analysts should continue to be part of the solution to the military's sociocultural deficit precisely because *they are civilians.* As warfare of the future is projected to be increasingly unconventional, irregular, and population-centric, our military will be forced to operate in largely *civilian* contexts.[24] The translation work needed to operate in this environment will entail not only translating the worldview of foreign area populations, but also translating the mores and practices of non-military U.S. agencies to members of the armed forces and vice versa. Such translation work is far from pointless exercise. In light of 21st century threats and security challenges, increasing opportunities for civilian-military dialogue is one of the best means to build better forces and a stronger national defense.

Unfortunately, it will not be easy to buttress the ranks of socioculturally savvy soldiers with civilian social scientists who are eager and willing to

work for the military. As the controversy over the military's interest in sociocultural expertise has made clear, many university-based sociocultural scholars still deeply distrust the military, and would not only refuse to work for the military themselves, but would also dissuade their graduate students from considering such a path. Attempting to deflate such gestures as mere political grandstanding, however, will do far less to move past the civilian-military divide than would weighing these scholars concerns deliberatively and taking them seriously as research challenges to be overcome. In particular, adhering to widely shared methodological standards of social science research renders the continued academic angst about the military's interest in sociocultural expertise essentially a moot point. Ultimately, the manner in which sociocultural initiatives are implemented today will go a tremendous way toward either bridging the gap or deepening the divide between civilian sociocultural scholarship and analysis that supports military operations.

In the meantime, those civil service organizations that already provide sociocultural research and analysis in support of military operations should continue to act as mediators between academia and the military. Unfortunately, those government organizations that already provide sociocultural expertise for military operations are struggling to meet the increasing demand for their services, especially because of manpower shortages. Such manpower shortfalls are not likely to be resolved soon, however. This reality may make institutional reorganization the best course of action. The military is always forced to prioritize its assets and can only concentrate operations in so many parts of the world at once. Civil service organizations that provide sociocultural expertise to the military must also find a way to respond to these new realities.

While there is merit in maintaining a wide range of area expertise within the Department of Defense in order to respond to unexpected contingencies, proving the utility of sociocultural knowledge and research to service commanders means that sociocultural research units need the institutional flexibility to respond to the military's operational priorities. One way to do this might be to temporarily detail civilian personnel from agencies and organizations that take a "long view" of national security issues (e.g. the Defense Intelligence Agency, defense universities, and the war colleges) to operational units, and to rotate them as necessary. There simply are not enough sociocultural and area experts in all of the DOD combined–and not likely to be in the near future–to justify the instinctive bureaucratic turf war. Instead of the standard operating procedure of intelligence stove-piping and institutional rivalry, the new security paradigm will likely demand information-sharing, communicative networking and robust cross talk between agencies.[25] Enlisting resident subject matter experts as reach-back support and as internal peer review for researchers who are collecting new ethnographic information in theater are other ways to take advantage of current assets and to get on with the task of providing warfighters with what they need to do their jobs.[26] Ultimately, the best case for augmenting sociocultural expertise across DOD will likely be made by proving the operational utility of sociocultural analyses on the ground.

Conclusion

In this article, I have tried to explain where some of the academic anxiety over the military's interest in sociocultural expertise originates. I have also suggested that the best response to that controversy is in fact to continue to blur the divide between military and academic spheres, in essence confronting and overcoming the academic critiques by embracing them. The challenges entailed in integrating academic sociocultural expertise into military operations fundamentally reflect a much larger gap between civilian and military spheres in American political culture, especially within the academy. This gap needs to be recognized not only as a handicap to military operations, but also as an essential detriment to our long-term national security. Through the conflicts in Iraq and Afghanistan, military commanders have become acutely aware of the primacy of civil-military cooperation in counterinsurgency, for defense support to public diplomacy, and for other forms of irregular warfare in foreign theaters. It may now be up to our national-level leaders to recognize and to respond to the chasm between civilian and military spheres on the domestic front in order to mobilize the kind of public service required to move past Vietnam-era divides and to collectively meet the challenges of the 21st century. ***MR***

NOTES

1. For example, COL Maxie McFarland, "Military Cultural Education," *Military Review* (March-April 2005): 62-69; Montgomery McFate, "The Military Utility of Understanding Adversary Culture," *Joint Force Quarterly* (July 2005): 42-48; MG Robert Scales, "Clausewitz and World War IV," *Armed Forces Journal* (July 2006), <www.armedforcesjournal.com/2006/07/1866019>; and LTC Fred Renzi, "Networks: Terra Igcognita and the Case for Ethnographic Intelligence," *Military Review* (September-October 2006): 16-22. Their work responds to a growing consensus among military strategists that warfare in the 21st century increasingly will be unconventional and irregular. For example, GEN Charles Krulak, "The Strategic Corporal: Leadership in the Three Block War," *Marines Magazine* (January 1999), available at <www.au.af.mil/au/awc/awcgate/usmc/strategic_corporal.htm>; Thomas Barnett, *The Pentagon's New Map: War and Peace in the Twenty-First Century* (New York: Berkeley Books, 2004); Colin S. Gray, "Irregular Enemies and the Essence of Strategy: Can the American Way of War Adapt?" U.S. Army War College, Strategic Studies Institute (March 2006); and COL Thomas Hammes, "Countering Evolved Insurgent Networks," *Military Review* (July-August 2006): 18-26.

2. Jacop Kipp, Lester Grau, Karl Prinslow and CPT Don Smith, "The Human Terrain System: A CORDS for the 21st Century," *Military Review* (September-October 2006): 8-15; and David Rohde, "Army Enlists Anthropology in War Zones," *The New York Times*, 5 October 2007, <www.nytimes.com/2007/10/05/world/asia/05afghan.html> (1 March 2008).

3. While cultural anthropologists will rightly claim a primordial ownership of ethnography, the methodology has been extensively used and developed in other social science disciplines as well. For example, it is commonly used by sociologists, and is often deployed in fields such as education, social psychology, and the sociology of knowledge. Ethnography is also routinely used as a behavioral research method in advertising, marketing, management, and design.

4. Renzi, *Military Review*; and Anna Simons, "Seeing the Enemy (or Not)," in Anthony McIvor, ed., *Rethinking the Principles of War* (Naval Institute Press, 2005).

5. McFate, 2005, provides a good overview of the inadequacies of the current system to acquire and to deliver sociocultural expertise to military commanders and warfighters.

6. Bruce Hall, "The Question of 'Race' in the Pre-Colonial Southern Sahara," *The Journal of North African Studies*, 10, 3 (September-December 2005): 339-367. A similar point is made in LTC Michael Eisenstadt, "Tribal Engagement? Lessons Learned," *Military Review* (September-October 2007): 16-31, 16-17.

7. LTC Kalifa Keita, "Conflict and Conflict Resolution in the Sahel: The Tuareg Insurgency in Mali," U.S. Army War College, Strategic Studies Institute (May 1998); Mohamed ag Ewangaye, "The Inadan, Makers of Amazigh Identity," in *The Art of Being Tuareg: Sahara Nomads in a Modern World,* eds., Thomas K. Seligman and Kristye Loughran (Los Angeles: UCLA Fowler Museum of Cultural History, 2006), 57-69; and Cynthia Becker, "Matriarchal Nomad or Freedom Fighter? Expressions of Amazigh Consciousness in Art by Moroccan, Algerian, and Nigerien Activists," paper presented at annual meeting of African Studies Association; New York, New York; 18 October 2007.

8. Susan Rasmussen, "Modes of Persuasion: Gossip, Song and Divination in Tuareg Conflict Resolution," *Anthropological Quarterly* 64, no. 1 (January 1991): 30-46; and Jeremy Keenan, "Ethnicity, Regionalism and Political Stability in Algeria's *Grand Sud*," *The Journal of North African Studies* 8, 3 (September 2003): 67-96.

9. See for example, American Anthropological Association (AAA) Executive Board Statement on the Human Terrain System Project, 31 October 2007, <www.aaanet.org/blog/resolution.htm>.

10. Ibid.; and Network of Concerned Anthropologists, "Pledge of Non-Participation in Counter-insurgency," available at <://concerned.anthropologists.googlepages.com/NCA-pledge.pdf>. Between 2005 and 2006, *Anthropology Today* also ran a series of articles on the U.S. military and intelligence agencies' interest in sociocultural knowledge.

11. Montgomery McFate, "Anthropology and Counterinsurgency: The Strange Story of their Curious Relationship," *Military Review* (March-April 2005), <www.army.mil/professionalwriting/volumes/volume3/august_2005/7_05_2.html>; and Alan Wolfe, "Academia (Kind of) Goes to War: Chomsky and his Children," *World Affairs* (Winter 2008): 38-47.

12. I derive this summary of concerns from the AAA's ad hoc report "On the Engagement of Anthropology with the US Security and Intelligence Communities," 4 November 2007, <www.aaanet.org/pdf/FINAL_Report_Complete.pdf>. In addition to the concerns I address here, some anthropologists are also deeply troubled about the potential damage that could be done to the field of anthropology if its scholars engage too directly with the military. Understandably, few military commanders are likely to concern themselves with the potential damage that could be done to the reputation of the field of anthropology, and issues that pertain to such potential damage are almost certainly best left to academic anthropologists to sort out. The American Anthropological Association executive board statement on the Human Terrain System project provides a good summary of some of these concerns.

13. This standard conforms to National Science Foundation guidelines concerning informed consent in ethnographic research. According to those guidelines, "[i]nformed consent is usually implied by the respondent's willingness to talk to the researcher." See <www.nsf.gov/bfa/dias/policy/hsfaqs.jsp#egraphy>.

14. Admittedly, I have not conducted such research in Iraq or Afghanistan. Nevertheless, I gather from talking to many soldiers and officers who have been to both that the experience of meeting eager interlocutors is not too dissimilar from their own. There are, of course, important considerations that must be taken into account with respect to protecting interlocutors, but this concern (which I address in the next section) should be differentiated from a concern about the perception of coercion.

15. There are institutional precedents for such defense-oriented social science research organizations, for example social psychology-oriented initiatives of the Defense Advanced Research Projects Agency (DARPA) and the Special Operations Research Office. See McFate, "Anthropology and Counterinsurgency."

16. This point is made, for example, in Kathleen DeWalt and Billie DeWalt, *Participant Observation: A Guide for Fieldworkers* (New York: Alta Mira Press, 2002), 198-9.

17. Social science research generally strives for representativeness and generalizability. These research imperatives should mitigate the bulk of concerns about the harm that may come to specific informants in the context of research conducted for the military. The charge of sociocultural researchers should be to collect information about *types of people*, not specific individuals. If what researchers are doing is the latter, then their claims to be doing social science research could and should legitimately be challenged.

18. According to the National Science Foundation, the Department of Defense already subscribes to the "common rule" regarding social science research, which is stated in Subpart A of the Department of Health and Human Services regulation on human research (Code of Federal Regulation [CFR] Title 45, Part 46: Protection of Human Subjects). Subpart A stipulates that human subject research must be reviewed and approved by an institutional review board that operates in accordance with the pertinent requirements of 45 CFR 46. However, Subpart A also *exempts* from this regulation "research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation." This exemption leaves a wide window in which sociocultural researchers who work for the military can operate while remaining in full compliance with existing federal regulations as far as their research focus should typically be of *types of people* in a given society and not specific, named individuals. See footnote 15.

19. The concerns these academics raise suggest that they are taking a conventional military approach as their model for "how the military works." The requirement to understand one's operating environment is considered the first imperative of Special Operations Forces (SOF), and social and political terrain is usually considered as at least one component of that environment. The need to understand your enemy's operating environment has also recently become enshrined as a pillar of counterinsurgency doctrine (see FM 3-24: *Counterinsurgency* [December 2006]). In other words, even conventional forces involved in COIN operations will need to adopt some basic tenants of the SOF approach. The view that the purpose of the military is to kill seems to completely disregard the distinctions between conventional military and SOF approaches.

20. David Kilcullen makes a persuasive case to this effect in David Kilcullen, "Ethics, politics and non-state warfare: A response to González," *Anthropology Today* vol. 23, no. 3 (June 2007).

21. LTC Alfred Renzi, "The Military Cooperation Group," Naval Postgraduate School Thesis, December 2006.

22. Renzi, NPS thesis; and MAJ Ron Sargent, "Strategic Scouts for Strategic Corporals," *Military Review* (March-April 2005), available at <www.army.mil/professionalwriting/volumes/volume3/august_2005/7_05_1.html>.

23. GEN David Petreaus, "Beyond the Cloister," *American Interest* 2, (July-August 2007), available at <www.the-american-interest.com/ai2/article.cfm?Id=290&MId=14>.

24. FM 3-24; and David Kilcullen, "Countering Global Insurgency: A Strategy for the War on Terrorism," 2004, available at <http://smallwarsjournal.com/documents/kilcullen.pdf>.

25. Carmen Medina, "The Coming Revolution in Intelligence Analysis: What to do when Traditional Models Fail," *Studies in Intelligence*, 46, no. 3 (2002), available at <www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol46no3/article03.html>.

26. For example, partnering human terrain team social science researchers in Iraq and Afghanistan with resident area experts at the Psychological Operations Group's Strategic Studies Detachment, the Defense Intelligence Agency, or Marine Corps Intelligence Agency.

REVISITING *MODERN WARFARE*
COUNTERINSURGENCY in the Mada'in Qada

Lieutenant Colonel David G. Fivecoat, U.S. Army, and Captain Aaron T. Schwengler, U.S. Army

NEARLY HALF A CENTURY AGO, Colonel Roger Trinquier, a French Army officer, wrote *Modern Warfare: A French View of Counterinsurgency*.[1] Intent on capturing what really worked in a counterinsurgency, Trinquier drew on the vast experience he had amassed as one of Jean Larteguy's centurions—the hard-bitten French regulars who served as the backbone of the French Army during the tough post-World War II counterinsurgency campaigns in China, French Indochina, and Algeria. *Modern Warfare* became a best seller in France and was translated into English in 1964, complete with an excellent forward by Bernard Fall, the renowned journalist-historian.

In his book, Colonel Trinquier defined modern war as "an interlocking system of actions—political, economic, psychological, and military—that aims at the overthrow of the established authority in a country and a replacement by another regime."[2] Fittingly, Trinquier's easy-to-read, practical guide to executing counterinsurgency operations has appeared on a variety of reading lists since the U.S. entry into conflicts in Afghanistan and Iraq.[3] However, since 2004, no author has examined Trinquier's theories to see if they remain applicable on the Iraqi or Afghan battlefields.

During the 3d Heavy Brigade Combat Team (3HBCT), 3d Infantry Division's (3ID) 14 months of combat in the Mada'in Qada, Iraq, the brigade faced many of the same challenges as Trinquier and his French counterparts did in French Indochina and Algeria.[4] The brigade also implemented key tenets of Trinquier's *Modern Warfare*—control of the population, destruction of the guerrilla forces, and eradication of the guerrillas' influence on the population—and achieved a significant reduction in violence, the initial stages of reconciliation, and an increase in the capabilities of both the Iraqi Security Forces and the qada government. From the 3HBCT's experience, it appears that many of Trinquier's theories remain as relevant to the 21st century counterinsurgent as they did to his 20th century predecessors.

Background

The 3d HBCT, also known as the Sledgehammer Brigade, deployed to Iraq in March 2007 as the third of five surge brigades. It is a transformed brigade consisting of 1st Battalion, 15th Infantry Regiment (1-15 IN); 2d Battalion, 69th Armor (2-69 AR); 3d Squadron, 1st Cavalry Regiment (3-1 CAV); 1st Battalion, 10th Field Artillery Regiment (1-10 FA); 3d Battalion, 3d Brigade

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Captain Aaron T. Schwengler is an infantry officer who served as the 3HBCT, 3ID, Chief of Operations during Operation Iraqi Freedom V. He is currently attending the Maneuver Captains Career Course, Fort Benning, GA. CPT Schwengler has a B.S. in political science from North Dakota State University.

PHOTO: Local Abna'a Al Iraq (Sons of Iraq) gather for a joint clearing operation with U.S. Army Soldiers from the 3d Infantry Division, Salman Pak, Iraq, 16 February 2008. (U.S. Army, SGT Timothy Kingston)

Special Troops Battalion (3-3 BSTB); and 203d Brigade Support Battalion (203 BSB). However, during the deployment, 2-69 AR was detached to Multi-National Division-Baghdad and fought in the streets of eastern Baghdad.

Colonel Roger Trinquier

From March 2007 to May 2008, the 3HBCT controlled the Mada'in Qada, the southeastern portion of Baghdad province. Bounded by the Diyala River on the west and the Tigris River on the south, the qada is over 2,500 square kilometers of mostly irrigated farmland with almost 1.2 million Iraqis living there. An ethnic fault line runs through the qada, with over 840,000 Shi'a living in the Narhwan, Jisr Diyala, and Wahida Nahias and 360,000 Sunni citizens clustered around the Salman Pak enclave.[5] During 2006 and early 2007, ethnic cleansing occurred along the boundary between the sects, resulting in an average of 53 murders per month during 2006. Key terrain in the qada include two bridges into Baghdad, the Baghdad-Al Kut Highway, the former Tuwaitha Nuclear Research Facility, and the Arch of Ctesiphon in Salman Pak.

Upon arrival in Iraq, the Sledgehammer Brigade focused on securing the population. Approximately 2,500 Soldiers served as part of the brigade combat team (BCT), with over 40 percent of them deployed in and amongst the population. The brigade constructed and operated from Forward Operating Base (FOB) Hammer; Combat Outposts (COP) Cahill, Carver, Cashe, Cleary, and Salie; and Patrol Base Assassin. On the ground, 1-15 IN operated in Salman Pak, 3-1 CAV controlled Jisr Diyala, and 1-10 FA patrolled Narwhan. In February 2008, the 13th Georgian Light Infantry Battalion (13th GG IN BN) joined the Hammer Team and occupied Wahida. In addition to 3HBCT, over 900 Iraqi Police, 500 members of the Wassit Emergency Response Unit, and over 2,000 National Policemen helped to control the qada. Collectively, the Iraqi Security Forces operated 129 checkpoints. Together, U.S. and Iraqi forces were able to provide almost five security force personnel for every 1,000 residents, equivalent to the force ratio in post-World War II Japan, but significantly less than the ratio in Bosnia under the implementation force (18:1,000 residents).[6]

Just as Colonel Trinquier experienced in French Indochina and Algeria, 3HBCT fought "armed elements acting clandestinely within a population manipulated by a special organization."[7] Due to the presence of two ethnic groups in the qada, the brigade fought two insurgencies—a Shi'a insurgency centered on the Jaysh Al Mahdi (JAM) political

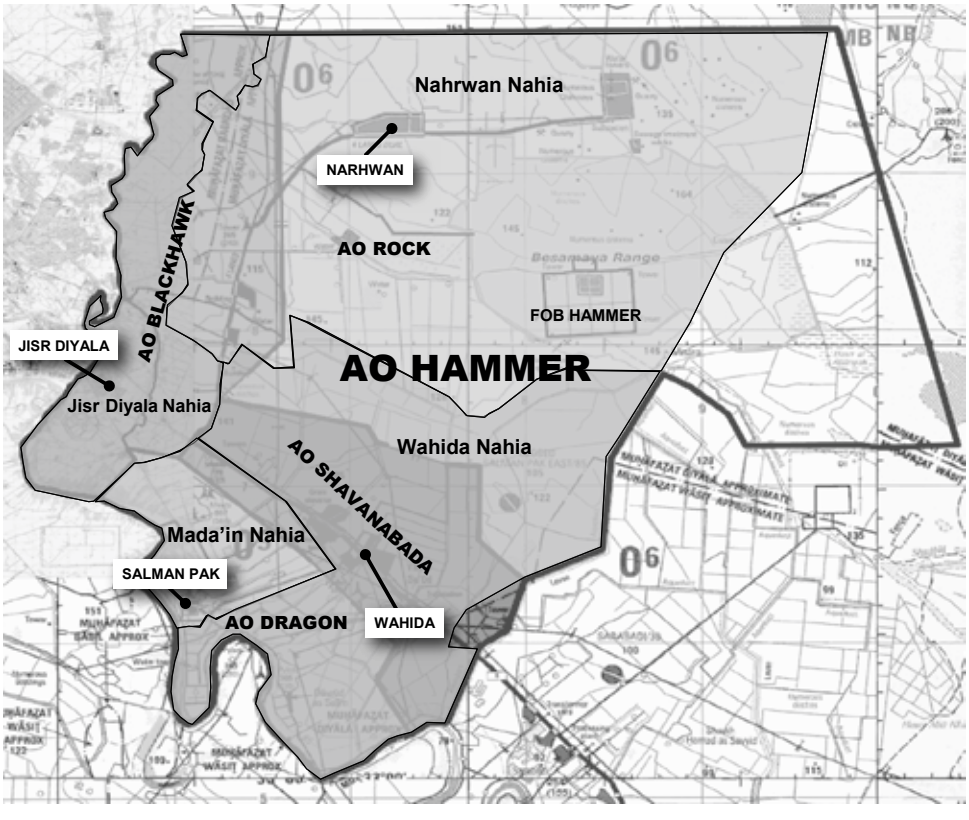


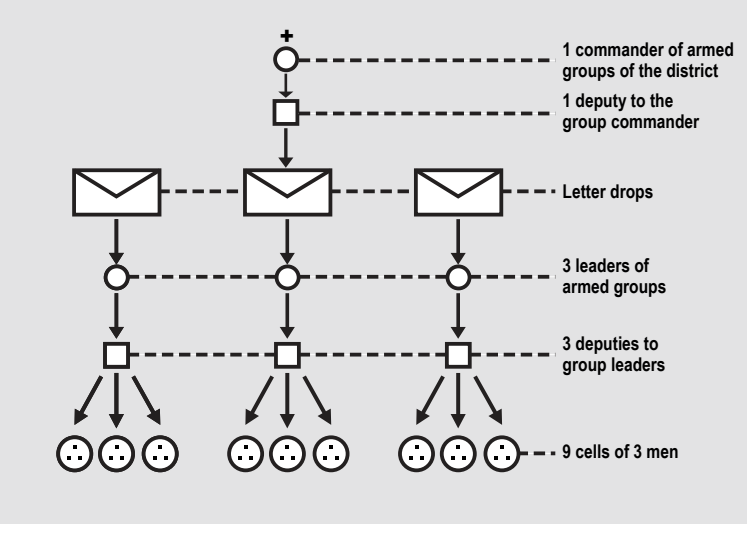
Figure 1. 3HBCT, 3ID Area of Operations (AO Hammer)

organization and the JAM special groups (or "direct action cells"), and a Sunni insurgency composed of members of Al-Qaeda in Iraq (AQI).

The Shi'a insurgency attempted to control the population in the Jisr Diyala, Narhwan, and Wahida Nahias by dominating the Iraqi Police, taking tacit control of the nahia governments, and managing the health care clinics. In addition, the insurgency solicited donations at the mosques and from local businesses to fund their operations. Tactically, the Shi'a insurgents defended their areas from sectarian attacks; attrited coalition forces (CF) with improvised explosive devices (IED), explosively formed penetrators (EFP), and rocket attacks; and disrupted CF operations with small arms fire. The Shi'a direct action cells in the 3HBCT area of operations consisted of over ten groups in and around Jisr Diyala, Narhwan, and Wahida that attacked coalition forces with 107-mm rockets and EFP IEDs. In the summer of 2007, several 107-mm rocket cells operated in the northern and western parts of the qada and attacked FOB Rustamiyah, FOB Hammer, and PB Assassin with deadly accuracy. Throughout the 3HBCT's time in the qada, several EFP cells conducted more than a score of attacks against 3HBCT forces along major routes.

The 3-1 CAV, 1-10 FA, and 13th (GG) Infantry Battalion primarily conducted operations against the Shi'a insurgency. Interestingly, the insurgency organized itself in brigades, battalions, companies, and platoons, although each formation was smaller than its American counterpart. The 3HBCT S-2 shop developed an order-of-battle chart that helped track the enemy's composition. The Shi'a organization replicated the configuration Trinquier fought in Algeria in the late 1950s. This order of battle chart proved a valuable tool as the brigade attempted to neutralize the insurgency in the qada.

The Sunni insurgency that 3HBCT fought was an AQI umbrella organization. It consisted of several IED cells, two vehicle-borne improvised explosive device (VBIED) cells, a suicide vest (SVEST) cell, multiple extra-judicial killing (EJK) cells, a foreign fighter facilitator network, a command and control infrastructure (leadership), and a logistics group (auxiliary) that provided safe houses and vehicles and transported fighters. Working out of the numerous villages around Salman Pak, AQI attempted to control the Nahia's population; defend the Sunni areas against sectarian aggression; attrit coalition forces with IEDs, mortar attacks, and small arms fire; and disrupt National Police and Iraqi Police operations with IEDs and sniping. During 2007 and 2008, AQI conducted seven VBIED attacks and seven SVEST attacks across the qada. The most spectacular attack occurred on 11 May 2007, when the insurgents detonated two VBIEDs simultaneously on the Baghdad-Al Kut Highway Bridge and the Old Jisr Diyala Bridge. Until repairs were complete five days later, the insurgents succeeded in blocking traffic into Baghdad from the east side of the Tigris. AQI also waged a conventional IED campaign along the Jisr Diyala-Salman Pak highway. In just over a year, 79 IEDs were found



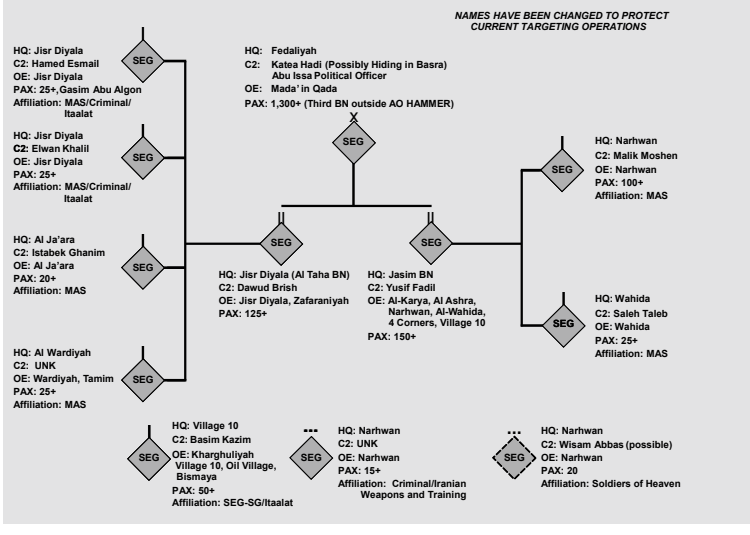


Figure 2. Algerian cell structure (left) and Hammer Shi'a Extremist Order of Battle (right).

or detonated along the route; fortunately, only five attacks caused casualties. AQI dominated Salman Pak until early 2008, when operations conducted by teams of coalition forces working with Sons of Iraq cleared them from the villages of Ja'ara and Bawi. Additionally, a special operations forces' (SOF) raid in early February 2008 killed a key AQI leader, captured 30 other fighters, and forced the remaining AQI to leave the sanctuary around Salman Pak. During the rest of its tour, 3HBCT hunted the remnants of AQI and worked with the Sons of Iraq to keep AQI from returning to the area.

Obviously, Iraq in 2007 and 2008 was not Algeria or French Indochina in the 1950s. However, remarkable similarities in the important topics addressed in Trinquier's *Modern Warfare*—population control, destruction of the guerrilla force, and eradication of the insurgents' influence, for example—show that his work is still valid. Indeed, a careful look at the two experiences—their successes and their challenges—will serve as a practical tool for others conducting modern warfare in the future.

Control of the Population

Colonel Trinquier argues, "Control of the masses through tight organization, often through several parallel organizations, is the master weapon of *Modern Warfare*."[8] The 3HBCT and the Iraqi Security Forces developed multiple means to control the qada's 1.2 million inhabitants. Three methods in particular—human terrain mapping and biometric data collection, the establishment of the Sons of Iraq, and the empowerment of the Iraqi Police to enforce the law in their neighborhoods—proved effective in establishing and maintaining control of the population.

Data collection. Our human terrain mapping involved a systematic collection of information about the populace of the Mada'in Qada. At the grassroots level, 3HBCT combat patrols kept meticulous records of their everyday contacts by obtaining photographs and demographic information such as full names, residential addresses, tribal affiliations, and employers.

Control of the masses through tight organization, often through several parallel organizations…

This example from A Troop, 3-1 CAV highlights the importance of human terrain mapping. Captain Troy Thomas, the troop commander, identified Al Bataa village as a staging area for AQI as they moved from south of Baghdad to Baquba, in the Diyala Province. To separate the insurgents from the rest of the population, Thomas conducted "a careful census of the entire population."[9] He took account of everyone in the village by collecting data and photographs of each male resident from age 16 to 40. He then placed the cards into a binder and had a local sheik and a Sons of Iraq leader vet the information. The 3-1 CAV used that information during subsequent operations to identify and question Iraqis who were new to the area and who did not appear in the census binder.

The 3HBCT also employed another aspect of human terrain mapping by using the "handheld interagency identification detection equipment" (HIIDE) or the "biometrics automated toolset" (BAT). These systems allowed the brigade to gather biometric data on people, including their pictures, fingerprints, and retinal scans. Human intelligence collection teams would further refine the map through their sources. The brigade also leveraged our Iraqi advisory task force personnel to collect atmospheric and economic data in each of the nahias. In short, the perception of being constantly monitored by intelligence, surveillance, and reconnaissance assets and the fact that CF possessed precise personal data made would-be insurgents think twice about their actions.

Citizens' groups. Across the country, the Sons of Iraq have made remarkable contributions to security, economic, and political progress. Also known as Concerned Local Citizens or "The Awakening," the Sons of Iraq began in the Mada'in Qada in July 2007, almost a year after their inception in Anbar Province. The brigade recruited close to 6,500 Sunni and Shi'a Sons of Iraq into this quickly growing program between July 2007 and April 2008. These brave Iraqis helped to achieve what Trinquier referred to as the goal of *Modern Warfare*: "control of the populace."[10] In June 2007, prior to the formation of any concerned citizens' groups, there was an average of 2.6 attacks daily in the qada. In April

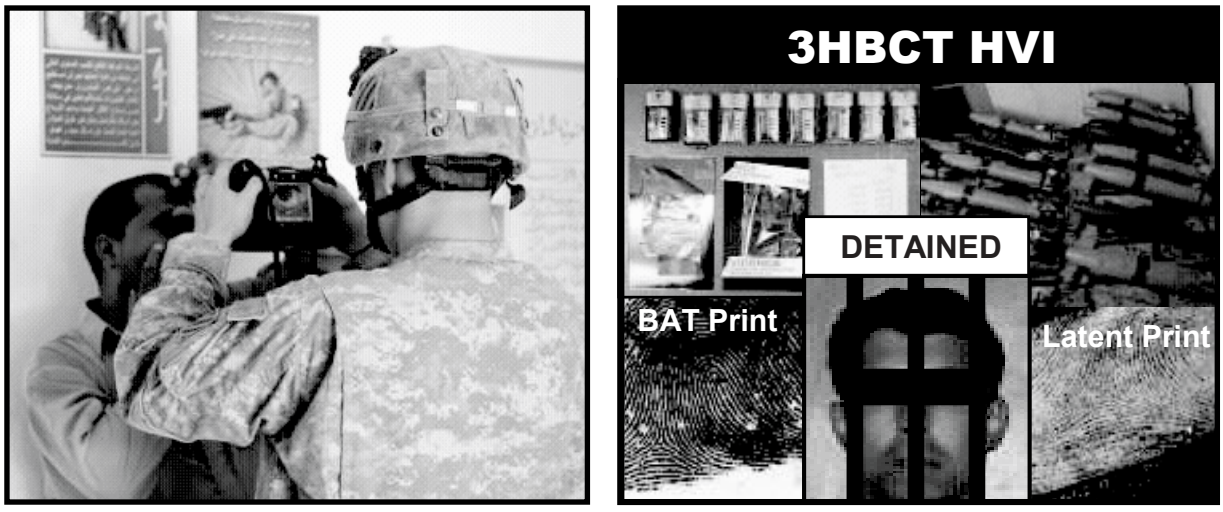


Figure 3. 3HBCT, 3ID, Soldiers use HIIDE to capture a retinal scan (left). A BAT match of a fingerprint led to the detention of a 3HBCT high value individual who participated in a rocket attack on FOB Hammer (right).

2008, after recruiting 6,500 Sons of Iraq, the daily attack average declined to 1.7 per day.

The inaugural Sons of Iraq group, in AO Hammer, was established in the small village of Al Arafia. Under the leadership of Muqtar Allawi and the protection of coalition forces, this citizens' group (and others) started to "take part in their own defense."[11] Earning $8.00 per day, they operated checkpoints, guarded neighborhoods, identified IEDs, reported weapons caches, and interdicted the movement of weapons and insurgents. During the first ten months, the group gave the brigade over 200 tips, operated 334 checkpoints, turned in 126 weapons caches, and located 45 IEDs. They increased security in the neighborhoods, decreased freedom of movement for insurgents, and removed IEDs and caches, thereby dramatically increasing security across the qada, slowly cutting off the insurgent from the population, and ultimately helping to break the back of AQI in the Mada'in Qada.

Over the next ten months, 3HBCT used the Arafia model to develop 50 different Sons of Iraq groups to improve security and degrade insurgent influence over the local population. The addition of this citi-

The Sons of Iraq guarding a checkpoint on Butler Range Road.

zens' group increased the number of security forces to residents in the qada to a 10 to 1,000 ratio, half the level in the initial stages in Kosovo (20:1,000).[12] Trinquier noted that the "total dependence on terrain and population is also the guerrilla's weak point."[13] Through the Sons of Iraq, 3HBCT exploited the insurgent's dependence on the population, took control of the terrain, eliminated the peoples' support for the insurgents, and significantly diminished insurgent control of the citizens of the Mada'in Qada. In addition, the local economies in controlled areas blossomed overnight due to the direct stimulus of $1.6 million in salaries each month.

Police forces. To improve the Mada'in Qada's 900-strong Iraqi Police force, the brigade assigned E Company, 1/125th Infantry and the 59th Military Police Company as its police transition team. In comparison, Trinquier asserted that "broad police operations will be performed by the regular police if they are adequate and capable."[14] Inadequate and incapable of leaving their own station, the qada's Iraqi Police were cowed by the insurgency in April 2007. Taking "advantage of the Army's presence and its protection and the assistance," the Iraqi Police, under the guidance of the police transition team, slowly brought law enforcement back to the qada.[15]

In addition to basic police training and daily mentoring, the brigade focused on helping the Iraqi Police track crime statistics. With accurate data now available, 3HBCT was able to show the Iraqi Police how the crime rate declined from 28 murders in February 2007 to only 5 in February 2008. The 2007 murder rate in the Mada'in Qada fell to a rate comparable to Detroit, Michigan's, in 2006.[16] Once the crime statistics program was in place, the brigade encouraged the police to begin enforcing laws and executing warrants issued by judges. In February 2008, the police took the next step and enforced five arrest warrants.

To effectively control the people, Trinquier instructed forces to "cut off the guerrilla from the population that sustains him, render the guerrilla zones untenable, and coordinate these actions over a wide area."[17] The 3HBCT's human terrain mapping and biometric data collection process identified and developed data on the population to better isolate the insurgent from his support, the Sons of Iraq groups made former insurgent strongholds dangerous to operate in, and the Iraqi Police began to restore the rule of law in the qada by enforcing laws and executing warrants. Together, these techniques helped 3HBCT drain the sea that the qada's insurgents swam in for so long.

Destruction of the Guerrilla Forces

Colonel Trinquier states that the goal of modern warfare for the counterinsurgent is to "eliminate from the midst of the population the entire enemy organization."[18] From March 2007 to April 2008, 3HBCT and the Iraqi Security Forces used this as their mantra; the brigade killed more than 160 insurgents and captured 560 more. Although the kinetic operations removed the insurgents from the streets, 3HBCT used other means to disrupt the insurgents. For example, aggressively tracking and interdicting the enemy's financial transactions, the brigade collected enough evidence for the authorities to charge insurgents with extortion and eventually prosecute and convict them in the Central Criminal Court of Iraq. Taken together, these endeavors helped to remove the insurgents from the Mada'in Qada.

The 3HBCT understood the need to relentlessly pursue the insurgents both inside the Mada'in Qada and outside it. Over the course of the deployment, 3HBCT killed or captured more than 30 of the brigade's or division's high value individuals (HVIs). Remarkably, almost half of these HVIs were captured outside of the Mada'in Qada—in places like Baghdad, Tikrit, Samarrah, and Abu Ghraib. Typically, just as Trinquier described nearly a half century ago, a concerted operation conducted by even a single battalion could "compel the guerrillas...to leave their comfortable hiding places"and seek refuge outside of the area. [19] Once removed, the insurgents would usually adopt easily targetable habits since they assumed that they were safe. The brigade tracked one target for nearly six months

Trinquier instructed forces to cut off the guerrilla from the population that sustains him…

before he was finally captured in Baghdad. This success was due in part to building detailed target packets on the HVIs that could be easily passed to other brigades and the special operations community. Such relentless pursuit had a tangible effect on the enemy. After detaining both a Narhwan JAM battalion commander and his successor, the brigade received an intelligence report indicating that no one in JAM wanted to assume command because they realized that they would likewise be detained by American forces.

In Algeria, the French fought the National Liberation Front which had a "financial committee [that] gathered funds from the population at large...and directly from big companies, banks, leading merchants, etc."[20] Similarly, 3HBCT was confronted by the Narhwan JAM battalion, which funded its operations by intimidating and harassing the local population and the owners of the brick factory, Narhwan's largest business enterprise. JAM extorted nearly 5,000,000 Iraqi dinars (approximately $4,200) from the factory owners each week, because refusal to pay the Shi'a extremists meant that the factory would be shut down or its owners kidnapped. By engaging local leaders and interrogating captured guerrillas, 3HBCT intelligence analysts traced the financial network, discovered the process for collecting the funds, and tracked down the key players involved in the extortion in and around Narhwan. The brigade then conducted operations that specifically targeted these key players. In one operation near the brick factory complex, 3-1 CAV detained seven extortionists immediately after they collected their weekly payola. In another operation, 3HBCT captured the Shi'a extremists' ledgers. Thereafter, the combat team focused on "following the money" to identify and detain extortionists, severely disrupting the Narwhan Shi'a extremist group's cash flow and subsequent ability to conduct attacks.

Once an insurgent was detained, 3HBCT worked diligently to ensure his conviction through the Central Criminal Court of Iraq. The brigade stressed to its units that to be successful at gaining convictions, the units needed to take a law-enforcement approach to the insurgency. Toward that end, 3HBCT conducted tactical site exploitation on each objective to collect, document, and organize legally admissible evidence. Units leveraged the Law Enforcement Professionals Program, an MPRI creation that couples experienced law-enforcement agents with Army battalions and brigades to increase conviction rates. Working with law enforcement agents, units constructed criminal case files of unclassified forensic evidence, including fingerprints, photographs of weapons caches, videos of attacks, sworn statements from both U.S. Soldiers and Iraqis, and even signed confessions. Moreover, the thousands of Iraqi biometric records enrolled in BAT and HIIDE proved invaluable in matching evidence found at attack sites to specific suspects.

As a result of this meticulous—sometimes high-tech—evidence collection, the brigade directly linked a dozen insurgents to specific IED and EFP attacks. Additionally, the weapons intelligence teams examined all evidence related to attacks in 3HBCT's AO to identify bomb-making signatures. These efforts allowed the brigade to track numerous

Dollars and dinars confiscated by the 3HBCT when it detained seven individuals suspected of extorting money from the Narhwan Brick Factories, in September 2007.

IED cells and determine their tactics, techniques, and procedures. As a result of detailed tactical site exploitation, organized-criminal case files, and biometric matches to specific IED or EFP attacks, the brigade sent 315 insurgents to the theater internment facility. In addition, as of April 2008, 24 insurgents had been convicted or were awaiting trial at the Central Criminal Court of Iraq.

To destroy an insurgency, Trinquier advises that a counterinsurgent force methodically pursue it "until the enemy organization is entirely annihilated."[21] The 3HBCT attempted to destroy both Shi'a and Sunni insurgencies through relentless pursuit of enemy leaders, focused efforts to eliminate insurgency funding, and law-enforcement approaches to countering guerrilla activities. Together, these efforts significantly reduced attacks, emboldened Iraqi Security Forces, and allowed Sons of Iraq to retake control of their communities. Although the insurgents in the Mada'in have not been completely eliminated, they have been neutralized to such an extent that, by April 2008, established laws were being enforced and the elected political leaders and local Iraqis had begun to control the future of the qada.

Eradication of the Guerrilla's Influence on the Population

As it was for Trinquier and his foes in Algeria, the goal for both the insurgent and the counterinsurgent in Iraq is to "control . . . the population."[22] While the Sunni and Shi'a insurgencies resorted to assassinations, murders, spectacular VBIED and SVEST attacks, and extortion of legitimate businesses to dominate the people, the 3HBCT used all six lines of effort—security, transition, governance, rule of law, economics, and communications—to manage the people of the Mada'in Qada to purge the insurgency and to support coalition forces and the government of Iraq. Some of the more successful policies that 3HBCT employed were reconstructing the irrigation infrastructure, rehabilitating the Narhwan brick factory, stimulating the economy using the Sons of Iraq, and establishing the Voice of Mada'in radio station. Collectively, these initiatives worked towards the "eradication of their [the insurgent's] influence on the population."[23]

The 3HBCT also funded over $37 million in projects during its 14 months in the Mada'in Qada.

Some of the more successful policies…employed were reconstructing the irrigation infrastructure…[and] stimulating the economy using the Sons of Iraq…

Several multi-echelon projects played an instrumental role in reducing the insurgents' influence, because these projects had both an initial impact and created longer-term, sustainable employment. Two examples stand out. In 2006, insurgents destroyed the huge pumps at the nine Nissan and Al Bawi pump stations. These pumps transferred water from the Tigris River into canals to irrigate farmers' fields dozens of kilometers away. Working with key leaders in the nahia and qada governments, the brigade coordinated and funded the repair of the pump stations over a nine-month period. The difference between the 2007 and the 2008 growing seasons was remarkable—fields that had lain fallow produced crops. Another project with a multi-echelon impact was the Narhwan Brick Factory complex. In 2007, over half its factories were dormant due to limited distribution of heavy fuel oil, a byproduct from oil refineries. Once again, the brigade worked with officials from Baghdad Province and local leaders to ensure that heavy fuel oil and electricity were available to power the kilns to dry the bricks. After several months of negotiations, the government began to move heavy fuel oil from the Bayji refinery, north of Baghdad, to the brick factories. Dozens of factories re-opened and production increased from 750,000 to 3.7 million bricks per day. The increased flow of oil and the resulting increased manufacturing capacity also increased employment six-fold, from 2,000 to 12,000 employees.

As mentioned above, the Sons of Iraq had a powerful influence on decreasing violence and revitalizing the economy in the Mada'in Qada. The $8 daily payment to each member resulted in $1.7 million in salaries to be spent in the local economy, providing an immediate and much-needed economic stimulus. This stimulus, coupled with the marked increase in security, translated into

"Before" and "after" pictures of a market where Sons of Iraq and 3HBCT conducted revitalization projects.

revitalized neighborhoods. No longer intimidated by extremists, and no longer afraid to conduct daily transactions, business owners reopened markets with the help of micro-grants. For example, in early 2008, 3HBCT conducted a market revitalization project in Salman Pak that cleaned up the market. And because the Sons of Iraq had money to spend, storeowners' profits doubled. In areas where 3HBCT did not form Sons of Iraq groups, the economic recovery was much less noticeable.

In early 2007, extremist groups were also winning the information war in the Mada'in Qada. Without a constant coalition force presence, and given limited sources of outside information and an abundance of extremist propaganda, the insurgency controlled what local Iraqis saw and heard. They were able to portray coalition operations as "brutalities in the eyes of the public."[24] The 3HBCT attacked the insurgents' messages through an effective information campaign that used leaflet drops, loudspeaker broadcasts, and face-to-face engagements. Iraqi advisory task force and tactical PSYOP teams gathered atmospherics following these IO attacks. Using FOB Rustamiyah's Peace 106 as a model, 3HBCT established the qada's first radio station, FM 107.1. Opened in January 2008 as a joint government of Iraq and coalition project, the "Voice of the Mada'in" provided a forum in which Iraqis could ask their questions, voice their concerns, and sometimes express their anger towards local, tribal and CF leaders. Since most Iraqis receive their information from radio and television, the radio station's potential impact on extremist information warfare is important. The Voice of the Mada'in radio station gave 3HBCT another means with which to thwart extremist propaganda and spread positive, accurate information about current events and the future of Iraq.

The 3HBCT attacked the Shi'a and Sunni insurgencies in the Mada'in Qada across all lines of operation. The completion of multi-echelon projects increased crop production for farmers and increased productivity and the numbers employed at the Narhwan Brick Factory complex. Establishing the Sons of Iraq provided jobs for unemployed males who might otherwise have taken up arms against the coalition. It stimulated the local economy and led to the reopening of many stores. Finally, the "Voice of the Mada'in" radio station opened lines of communication between ordinary Iraqis and the qada government. More important, these endeavors helped eliminate the insurgents' control and influence over the Mada'in's citizens.

Torture in *Modern Warfare* and the Law of Land Warfare

Unfortunately, *Modern Warfare* gained notoriety because of Colonel Trinquier's advocacy of torture as an acceptable means of defeating an insurgency. He believed that the fear of torture is the only deterrent for the guerrilla since "he cannot be treated as an ordinary criminal, nor [sic] like a prisoner taken on the battlefield."[25] This quotation demonstrates Trinquier's ignorance of the Just War tradition's stance on treating guerrillas as legitimate combatants unless they are proven guilty of violating the norms of war. His mistaken attitude encouraged violations of the 1949 Geneva Protocols of War, to which the French had subscribed, that called for due process in determining an insurgent's status.

From a practical perspective, in a COIN environment the moral corrosiveness of torture runs counter to long-term goals, as it did for France in Algeria. Torture backfired on the French and they lost their strategic legitimacy. Trinquier's advocacy of torture dishonored himself and the French military.

The 3HBCT's experience demonstrated the effectiveness of other measures that both deterred insurgents and allowed the brigade to maintain the standards expected of Americans. In the post-Abu Ghraib environment, rigorous adherence to the law of land warfare is essential. Many of the legitimate measures already discussed—such as population control, biometric data collection on adult males, and relentless pursuit of the enemy—provided that deterrent. During its 14 months in Iraq, the brigade captured more than 560 suspected insurgents. In the same time period, military intelligence interrogators in the division holding area-annex conducted over 1,500 interrogations, with most detainees experiencing an average of 3 interrogations. The system produced 345 intelligence reports without once resorting to torture. The reports the brigade gleaned from interrogations led to numerous operations in and outside the brigade's area that targeted extremists without undermining our long-term credibility. More important, it contradicted Trinquier's assertion that torture is the only way to develop intelligence on an insurgency and deter the guerrilla.

Challenges

From his experience, Trinquier documented several "errors in fighting the guerrilla."[26] Likewise, 3HBCT experienced missteps in fighting the insurgency in the Mada'in Qada. Poor placement of outposts, the lack of a standardized national ID card for Iraqis, and 3HBCT's initial large sweep operations all presented challenges that the brigade worked to overcome throughout its tour.

The 3HBCT built several outposts in locations where the Soldiers did not control the population as they could have. Two of the brigade's outposts—Patrol Base Assassin and COP Salie—were perfectly placed in the midst of a town with Iraqi Police or National Police within arm's reach. However, the other five—FOB Hammer, COP Cashe, COP Cahill, COP Cleary, and COP Carver—were separated from the population, the Iraqi Security Forces, or both. FOB Hammer, although next to an Iraqi Army training compound (FOB Besamiya), was 25 kilometers from any major population center. As a result, the zone of security around the FOB benefited only the few sheepherders who lived in a couple of villages south of the FOB. In retrospect, better positioning of the outposts could have helped the brigade to institute greater control over the 1.2 million citizens of the Mada'in Qada.

The lack of a national identification card also made population control challenging. For 25,000 Iraqi dinars (about $13), any adult Iraqi could get a Jensia card, as long as two other people vouched for his identification. HBCT improvised several solutions to overcome the lack of an ID card, like A Troop, 3-1 Cavalry's binder on Al Baata Village, or B Company, 1-15 Infantry's Sons of Iraq ID card, but a tough-to-forge, accurate, and rigorously enforced system of national identification would have made controlling the population less of a challenge.

Prior to the fall of 2007, 3HBCT engaged in several large unit sweeps, like Operations Blore Heath I and II, Beach Yellow, and Bull Run. Each of these operations achieved short-term tactical successes: several insurgents killed or captured, multiple weapons caches seized, and a handful of IEDs removed. However, each of these operations failed to destroy the insurgency because they did not establish a permanent coalition, Iraqi Security Forces, or Sons of Iraq presence in the villages to keep the insurgents from returning. In the fall of 2007, the 3HBCT Commander, Colonel Wayne W. Grigsby, Jr., mandated that all major operations incorporate Sons of Iraq to hold the terrain, man checkpoints, and keep the insurgents from returning to cleared areas. Subsequent operations—Tuwaitha Sunrise I and II, Ja'ara Sunrise, Bawi Sunrise, and Durai'ya Sunrise—achieved not only similar tactical successes, but also emplaced Sons of Iraq checkpoints to prevent the insurgents' return.

From 2007 to 2008, 3HBCT experienced many of the same impediments as their French brethren had before them. Poorly located outposts, the lack of an official national identification card, and large sweep operations without maintenance forces all hampered the brigade's ability to control the population, and thus its ability to neutralize the Shi'a and Sunni insurgencies.

Conclusion

Five years of operations in Iraq have taught a generation of American Soldiers some of the best practices to use in counterinsurgencies. In fact, some of our Army's young men and women may soon boast more COIN experience than their historic predecessors. Still, Colonel Trinquier's work will remain a useful guide for leaders conducting COIN in Iraq. The advent of precision-guided munitions, the internet, unmanned aerial vehicles, mine resistant ambush protected vehicles, IEDs, and EFPs has not changed Trinquier's principles. The 3HBCT's 14 months of continuous combat in the Mada'in Qada resembled the French experience in Indochina and Algeria 50 years earlier because those basics have not changed. Together, the principles of controlling the population, destroying the guerrilla forces, and eradicating the guerrilla's influence helped to neutralize both Sunni and Shi'a insurgencies. Trinquier's advice also helped initiate the reconciliation process for disenfranchised Sunnis, embolden and enhance the Iraqi Security Forces, and improve the qada government.

Our employment of Trinquier's legitimate principles during our 14 months of counterinsurgency operations has brought significant improvements to the Mada'in Qada. As the French did in Algeria, the 3HBCT experienced some difficulties along the way. Nevertheless, by selectively applying the moral lessons of *Modern Warfare* and heeding the wisdom gained by other American units over the last five years, we made good progress. American Soldiers operating in places like Iraq and Afghanistan in the future can build upon both Trinquier's and 3HBCT's experiences to conduct effective counterinsurgency operations. ***MR***

NOTES

1. Colonel Roger Trinquier served as an officer in the French Colonial Marines and Army from 1931 to 1961. During that span, he spent six years in China before World War II in a low-intensity conflict, four years conducting counterguerrilla operations in French Indochina after the war, and three years executing COIN operations in Algeria. He wrote *Modern Warfare* immediately after his retirement in 1961.
2. Roger Trinquier, *Modern Warfare: A French View of Counterinsurgency*, trans. Daniel Lee (New York: Praeger, 1964), 6.
3. The book is available for download from the Command and General Staff College website. See <www-cgsc.army.mil/carl/resources/csi/trinquier/trinquier.asp>. Chapter 5, "Identifying the Adversary;" Chapter 8, "Errors in Fighting the Guerrilla"; and Chapter 10, "Conducting Counterguerrilla Operations", are particularly enlightening for a leader deploying to Iraq.
4. A qada is a subordinate government structure in an Iraqi province. The Baghdad Province, of which the Mada'in Qada belongs, is one part of six qadas and nine security districts.
5. A nahia is a subordinate government structure in a Qada. The Mada'in Qada has four nahias: Narwhan, Jisr Diyala, Wahida, and Salman Pak. It is the lowest form of government recognized by the Baghdad Provincial Government.
6. Peter J. Boettke, Christopher Coyne, and Peter Leeson, *Institutional Stickiness and the New Development Economics—2005*, <www.ccoyne.com/Institutional>, 2005, 25.
7. Trinquier, 8.
8. Ibid., 30.
9. Ibid., 31.
10. Ibid., 16.
11. Ibid., 75.
12. Boettke, Coyne, and Lesson, *Institutional*, 25.
13. Trinquier, 64.
14. Ibid., 43.
15. Ibid., 44.
16. Data taken from <http://detroit.areaconnect.com> Detroit, MI, with a population of 1 million, had 418 murders in 2006 with an average of 47.2 murders per 100,000 citizens. The Mada'in Qada, Iraq with a population of 1.2 million, had a reported 243 murders in 2007 with a weighted average of 40.5 murders per 100,000 citizens. The average number of murders was weighted with the assumption that only 50 percent of the murders in the Mada'in Qada were reported in 2007.
17. Trinquier, 65.
18. Ibid., 43.
19. Ibid., 85.
20. Ibid., 12.
21. Ibid., 48.
22. Ibid., 15.
23. Ibid., 65.
24. Ibid., 48.
25. Ibid., 21.
26. Ibid., 52.

How Jesse James, the Telegraph, and the Federal Reserve Act of 1913 Can Help the Army Win the War on Terrorism:

The Unrealized Strategic Effects of a Cashless Battlefield

Peter E. Kunkel

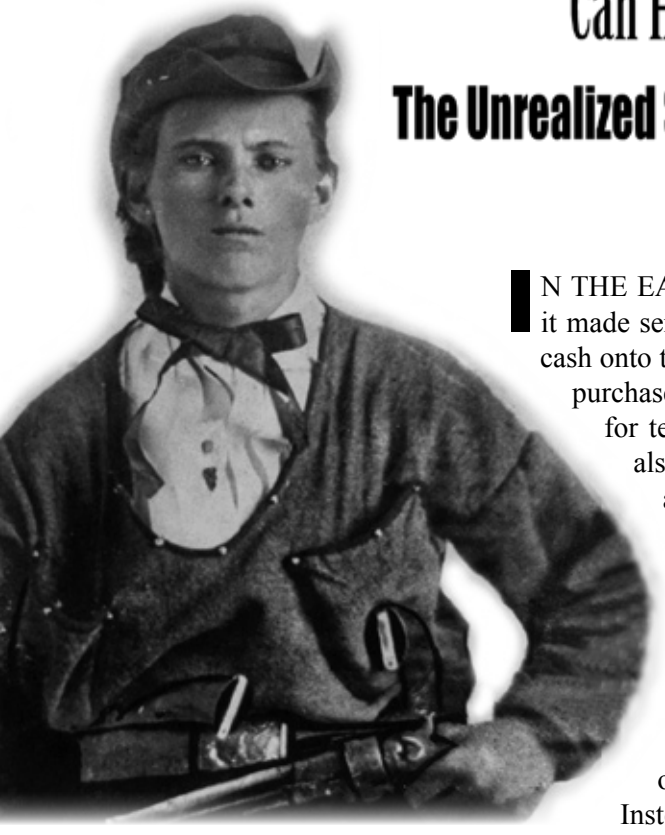


PHOTO: 17-year-old Jesse James, 1864. (Library of Congress)

IN THE EARLY PHASES OF OPERATIONS in Iraq and Afghanistan it made sense for maneuver units to bring large amounts of American cash onto the battlefield. Army units used it to make various battlefield purchases, including construction materials for foxholes and flooring for tents and even bottled water for Soldiers. These Army units also used cash to reward tipsters or even to pay for battle damaged private property. Cash, particularly a hard currency like American cash, was the best tool for the job at hand, and local residents preferred to accept it.

Even so, the volume of these transactions was colossal. For the last several years, the Army has spent approximately $1.5 billion per year in American cash in theater.[1] Relying on cash, year-after-year, at such a scale to handle such purchases in these economies meant missing, year-after-year, an opportunity to advance economic and security objectives there. Instead, transitioning today away from cash could make valuable improvements to these unstable economies.

Excessive reliance on cash for such purchases stunts entrepreneurial activity and job creation. But using commercially available, non-traditional banking methods for these purchases could arrest the trend. Further, transitioning away from cash would eliminate handling large sums on the battlefield, eliminating the need to put every person involved in distribution and usage at risk of personal violence.

Life in the Wild West of Reconstruction-era western Missouri offers some salient lessons to understand the insidious military consequences of this large-scale reliance on cash in Iraq and Afghanistan today. During those times, insurgents enjoyed strong popular support and operated with impunity. During those times, cash (actually state-chartered bank notes) was the dominant medium of value.[2] During those times, changes in banking and wire transfer absorbed cash, helping to settle the Wild West. Today, the same principles can be applied in Iraq and Afghanistan to advance economic and security objectives there as well.

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Jesse James

Of course, the most famous figure from Reconstruction-era western Missouri is the folk legend, Jesse James. James was nearly 14 at the beginning of the Civil War, too young to fight for the Confederate side. However, just as massed warfare gave way to insurgency, James came of age, and he rose to notoriety for banditry during and after Reconstruction. Against great odds, he managed

to elude capture by law enforcement officials for 17 years until his murder by a bounty hunter in 1882.[3]

Surely, his success was due in part to widespread support from local residents. One source of his appeal may have been the sheer audacity of his successive bank and train robberies, but that alone probably would not explain why he eluded capture for so long. Rather, a more plausible source of his popular support was likely his reputation as a Confederate champion.[4]

So, for some, James was merely a violent outlaw bent on robbing trains full of cash, using violent insurgent tactics. However, for others, he wasn't merely employing insurgent tactics, he was, in fact, an insurgent. Indeed, local citizens dissatisfied with current political arrangements in Missouri aided him. The distinction between outlaw and insurgent was probably just as unclear to the people on the ground in Missouri as it is today in Iraq and Afghanistan. Because James directed his energies specifically at cash, he himself contributed to the confusion.

Cash Economy in Reconstruction-era Missouri

Those trains were loaded with cash in the first place because gold, the official specie, was virtually unavailable, and even state-chartered bank notes and the new federal "greenbacks" were in rare supply. Cash was extremely precious as the only alternative to the widespread practice of bartering.[5,6] Cash had to be physically transported into the frontier region in trains, placed in bank vaults, and then distributed by bank cashiers to individuals for their own safekeeping and use. In such an environment, it would be likely that people would not use cash for frivolous purchases, or even some consequential ones, and banks and trains would be very lucrative targets for bandits like Jesse James.

The Telegraph

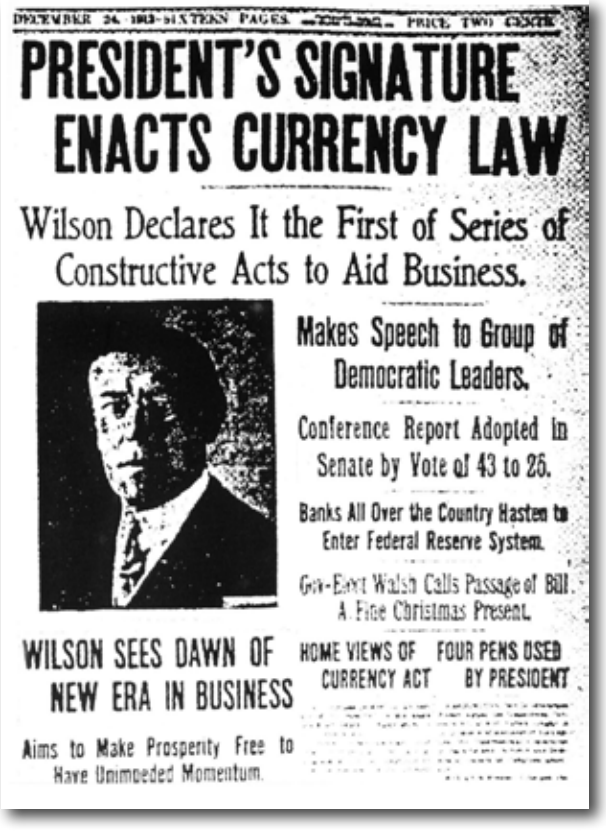
Fortunately, during James's lifetime, an alternative to moving cash across great distances by train was developed. In 1871, Western Union introduced money transfer by telegraph, allowing "money" to be moved freely and without risk of violent theft. Actually, money was not literally being moved at all. Instead, bankers were simply communicating by telegraph and making mutual bookkeeping entries in their respective ledgers. However, in western Missouri, James's violent train robberies continued because the trains still had cash in them. And, clearly, so did the banks.

The distinction between outlaw and insurgent was probably just as unclear to the people on the ground in Missouri as it is today in Iraq and Afghanistan.

The Federal Reserve Act of 1913

It was not until the passage of the Federal Reserve Act of 1913, creating "an elastic currency" and the Federal Reserve System, that the nation even had centralized large-scale substitutes for cash in the form of demand deposits and time deposits regulated at the national level. Banks could offer demand deposits and time deposits, i.e., checking accounts and savings accounts, without having to stockpile and physically transport large quantities of cash. Accounts were simply bookkeeping entries in a ledger.

Bandits like Jesse James could not steal an accounting ledger and expect to use it for much.



DECEMBER 24, 1913—SIXTEEN PAGES. PRICE TWO CENTS.

PRESIDENT'S SIGNATURE ENACTS CURRENCY LAW

Wilson Declares It the First of Series of Constructive Acts to Aid Business.

Makes Speech to Group of Democratic Leaders.

Conference Report Adopted in Senate by Vote of 43 to 26.

Banks All Over the Country Hasten to Enter Federal Reserve System.

Gov. Ezra Walsh Calls Passage of Bill A Fine Christmas Present.

WILSON SEES DAWN OF NEW ERA IN BUSINESS

Aims to Make Prosperity Free to Have Unimpeded Momentum.

HOME VIEWS OF CURRENCY ACT

FOUR PENS USED BY PRESIDENT

Headline on a newspaper clipping dated 24 December 1913 announces that Woodrow Wilson has signed the Federal Reserve Act.

No bandit could use an accounting ledger to make a purchase. And if the banks had fewer requirements to store cash in their vaults, then they would no longer need to transport so much cash in trains. And if the banks would no longer need to transport cash in trains, then thieves would generally no longer have reason to rob trains because there would have been scant cash in the train to steal.

So, telegraphs and cash substitutes offered by banks presented a compelling countermeasure to violence brought on by the prevalence of cash. Bankers had largely removed the temptation for thieves to commit physical violence, regardless of whether the thieves were bandits or insurgents.

These innovations solved problems not only for banks but also for everyday citizens. People no longer needed to store cash in their homes or fear for their own or their family's security simply because they had cash or because insurgents sought to make a political statement by stealing from moneyed interests. In James's day, when barter was prevalent, these lessons would have been particularly well understood.

The lesson the Jesse James experience offers is how to discourage thieves from resorting to physical violence. Wire transfer and cash substitutes, the tools of modern banking, remove temptations for physical violence.

Converting the Challenge into an Opportunity

The Army generally understands that security in Iraq or Afghanistan or, indeed, in any counterinsurgency environment, would improve if a local banking sector existed. Certainly, Army disbursing agents on the ground in Iraq and Afghanistan today understand well that enticing local Iraqis and Afghans to get bank accounts would greatly simplify disbursements. However, most assume that implementing a banking system in a counterinsurgency is a strategic challenge that traditional Army operations, logistics, and disbursing procedures cannot squarely address. Therefore, with the exigencies of ongoing battle—ameliorated by resorting to cash in the short term—and with incessant delay in passing legislation to protect depositors and creditors, creating a viable Iraqi private banking system from whole cloth seems out of reach.

The Army generally understands that the security in Iraq or Afghanistan or, indeed, in any counterinsurgency environment, would improve if a local banking sector existed.

Nevertheless, there is a way to convert this challenge into an opportunity. If the Army sees itself as a market participant with enough purchasing power to change the behavior of other market participants, a path out of this confusion appears.

Between 2003 and 2008, Army finance units in Iraq purchased from or made payments to Iraqis for goods and services worth nearly $7 billion. They paid this staggering sum in cash. Including the nearly $12 billion of seized cash from the previous regime tendered to the Iraqi government, the total reaches $19 billion in cash introduced by the Army into the Iraqi economy.[7] Factoring in the second- and third-order effects of spending all of this cash in the Iraqi economy, this sum represents approximately 20 percent of official Iraqi gross domestic product from 2003 to 2007.[8]

It is important to make two distinctions. First, although Iraq surely has a vigorous unofficial economy (i.e, a black market), Iraq is still an oil-exporting nation. As such, its economy is already robust compared to many war zones, so at 20 percent of GDP, the Army's impact on the economy is even more impressive. Second, this spending is separate from the large-scale reconstruction projects administered through the Coalition Provisional Authority, the State Department, or other relief agencies. There, the payees are U.S. or international engineering contractors that hire American, third-party national, or Iraqi employees—the spending really made its way into the Iraqi economy only to the extent that Iraqis were hired as employees. Here, payments were due simply to the sheer gravitational pull attributable to sustaining such a large-scale Army presence.

Under these circumstances, it seems reasonable that the Army, with such immense purchasing power in addition to its manifest kinetic power, would have the necessary tools at its disposal to dry up the cash

by mandating and creating incentives for its vendors and others to accept wire transfers, also known as electronic funds transfers (EFTs).

Of course, for this to work, these counterparties would require access to bank accounts so they could accept payment by EFT. Since Iraqi state-run banks with brick-and-mortar branches have generally proven themselves unfit for the task (essentially, they are just cashiers), the Army must help these counterparties find an alternative. Commanders will need to take two steps.

The commanders' first step must be to mandate EFT for all payments in their sectors. Counterparties, be they concerned local citizens or vendors, sheiks or contractors, will not set up bank accounts and accept EFT without commanders mandating it. In many cases, commanders may need to create incentives for counterparties to take this step (e.g., monetary inducements).

However, after these sheiks and contractors have received the first few EFT payments, commanders will have to solve an even harder problem. These sheiks and contractors will not have cash to pay employees' salaries or their own subcontractors. The employees and subcontractors, in turn, will need to get bank accounts to accept EFT so they can get paid. The problem is that, although brick and mortar bank branches with EFT capability are opening in Iraq, in a nation with a population of 26 million people, commanders might have to wait a long time before such banks will open in their sectors.[9] Further, once the Army stops delivering cash to the battlefield, this problem will intensify. Something better is required.

The commanders' second step will be to help the sheiks and contractors find a banking solution—other than traditional brick-and-mortar bank branches—that can link outdated or non-existent banking sectors to modern, private banking institutions and regulatory regimes. Such commercial banking products and providers exist today, and they use mobile technologies.

For example, on 10 February 2008, the global mobile telecommunications company, Vodafone, partnered with the leading telecommunications operator in Afghanistan, Roshan, to launch "M-Paisa," the first ever mobile money transfer service in Afghanistan.[10]

As commanders insist their vendors use mobile banking technologies, the aggregate effect will

U.S. Air Force, SSGT Jason Robertson

A U.S. Soldier pays a local citizen in cash—in this case Iraqi dinars—22 November 2007, in Baqubah, Iraq.

be to accelerate the penetration of retail banking into the population. Army EFT payments, diffusing throughout the Iraqi or Afghan economies or, for that matter, any economy in which the Army operates, can help wean the population from cash, thereby priming the pump in converting an unbanked population to a banked population.

So the importance of the commander's role cannot be overstated. Although the contracting and resource management communities in the Army have had some success getting EFT implemented under certain circumstances, given the operational importance but cultural resistance to mandating EFT and mobile banking, this task must fall to operational commanders and not be relegated to a support function.[11]

Mobile Banking

Mobile banking is a technology unknown to most Americans. It allows the unbanked to conduct a variety of financial transactions by using existing cell phone networks. A solution that is both portable and virtual, mobile banking is versatile in the types of payments that it supports: payroll, retail, business-to-business, money transfer, and micro-lending. It allows the unbanked to move funds and credit quickly and easily, eliminating the requirement to carry around substantial amounts of cash. However, if cash is needed and no cashier or automated teller is available, all a mobile-banked consumer needs to do is get cash from a mobile-banked vendor after a purchase. This is similar to the point of sale "cash back" option available at supermarkets and pharmacies in the U.S. today.

Cell phones allow users to communicate both voice and data without the major investment of time and money to build a land-line infrastructure.[12] Innovations in banking technologies and models that use these same wireless communication networks to provide banking services to the world's poor are promising.

As these mobile banking networks are spreading rapidly and extending to ever more remote regions to overcome the lack of bank branches and wire-line banking infrastructure, when the Army is called upon to enter a part of the world that has no banking sector, it should leverage these same banking technologies and models.[13]

In such cases, the Army likely would not be able to rely on local legislation protecting depositors, creditors, and borrowers, so it would have to build a system that can reach back to foreign legal protections and financial indemnities and infrastructure. Further, the Army would possibly even have to underwrite such financial indemnities by using appropriated funds.

Mobile banking is a technology unknown to most Americans. It allows the unbanked to leverage existing cell phone networks to, essentially, make a phone call to conduct a variety of financial transactions.

However, even though mobile banking uses existing cell phone networks and reaches back to existing banking infrastructure, the challenge confronting commanders is to get that first sheik or contractor to embrace it. The challenge is to harness the power of the network effect.

The Network Effect

The network effect is well understood in the Army. A network with only one node is worthless. With a second node, it becomes more valuable. With a third node, it becomes more valuable still, and so on. When it has millions of nodes, the network has tremendous value. Cell phones are already being used all over the world, including 10.9 million cell phones in Iraq in 2007, so it makes sense to use these preexisting networks. However, this is only half the problem.[14]

As commanders ask local contractors or others to accept payment by electronic funds transfer, these local first-adopters will not be able to turn the funds around and spend them again unless their own contractors or payees also have bank accounts. For vendors, the risk is high, as they have to make payroll on time. For individuals, it is cold comfort indeed to accept on faith that precious funds will be available on demand. It is risky for the Army's small unit commander to experiment with mobile banking on strategic programs, such as the Commander's Emergency Response Program (CERP), currently heavily conducted in cash.

U.S. Air Force, TSGT John L. Houghton

Guests, faculty, and Iraqi students tour the new Baghdad University Internet Cafe and Baghdad University Museum, December 2003. The museum and internet cafe were rebuilt using money from the Commander's Emergency Relief Program (CERP) funds from the U.S. Army's 1st Armored Division.

CERP is an invaluable tool for field commanders to influence their environment without resorting to force. It enables them to provide urgent humanitarian relief and reconstruction assistance. Commanders use cash to make payments pursuant to various agreements for many different kinds of projects. Examples of these kinds of payments include payments for road and school projects, battle damage repair, civic cleanup activities, condolence payments, detainee payments, and even "concerned local citizen" payments.

Therefore, conversion of CERP payments from cash to EFT, essentially a simple contract amendment, has both the highest risk and highest reward. On one hand, the commander does not want to endanger the influence CERP affords, but on the other, the best way to overcome the network effect is to carefully pick counterparties who have the ability, through their own purchasing power, to affect the largest population and then have them follow suit. The numerous, diverse CERP payees might become appropriate conduits for the growth of the network.

Local contractors working with the Army also wield important purchasing power over their subcontractors and employees, but Army relationships with contractors typically involve sophisticated transactions that recur repeatedly and so may lend themselves to EFT at banks. In any case, mobile banking would not be optimal for the large payments that tend to occur in a contracting environment.

By adopting a combination of EFT for large funds transfers and mobile banking for non-repetitive or small funds transfers, the Army can begin the process of mopping up the $1.5 billion of cash the Army brings into the battlefield. This combination of mobile banking and EFT, or expeditionary banking, can perform the same function for modern battlefields as traditional banking and wire transfer did in Missouri and elsewhere in the Wild West.

There are additional benefits as well. A functioning banking sector not only reduces the risk of physical violence (for market participants who substitute cash with bank accounts) but also provides powerful tangential advantages for the host nation and the Army.

By adopting a combination of EFT for large funds transfers and mobile banking for non-repetitive or small funds transfers, the Army can begin the process of mopping up the $1.5 billion of cash the Army brings into the battlefield.

Job Creation and Basic City Services

In Iraq or in any counterinsurgency, the challenge for the Army is to win the trust of local residents to gain their support to deny insurgents sanctuary. To do so, a genuine improvement in the quality of local residents' lives must occur. Job creation is imperative. Provision of basic city services must occur (e.g., septic removal, well digging, trash collection), but during counterinsurgency, the regime is likely to be unstable, rendering job creation and the provision of city services by government agencies very difficult.

Since government agencies are likely to be hamstrung, private contractors could fill the gap to provide basic city services on behalf of the new regime. This model could provide jobs as well as the services themselves, and it could make an immediate, perceivable improvement for local residents. It could also support the Army's objective of winning their trust.

But such contractors would need access to investment capital to get started. To be sure, cash could provide that seed capital, but modern, foreign public and private lending institutions that can bring in robust seed capital will not lend in cash. The risk of loss is too high. These institutions require a means to lend electronically into a functioning host-nation banking sector.

If a functioning banking sector were in place, local entrepreneurs could tap into rich sources of capital to compete for contracts to provide basic city services. Thus, by injecting a combination of mobile banking and EFT payments into the economy, the Army can help create a functioning banking sector and facilitate the extension of credit to ready, willing, and able entrepreneurs. Then, jobs could be created and city services could be more effectively performed. More important, an ever-greater proportion of the population would be literally invested in the new regime and less dependent on prewar, pre-regime, and perhaps state-managed institutions.

In addition, as access to capital for entrepreneurs creates economic activity, it reduces the number of unemployed men who might otherwise become desperate enough to take up arms against the Army simply for pay. However, there are other more direct counters to violence.

Additional Counterinsurgency Tools

Although a functioning banking sector should eliminate some of the temptations for physical violence in society, if insurgent violence or simple criminal violence does occur, a functioning banking sector also creates tools to check it.

Insurgents use cash to acquire weapons and other resources that degrade security and stabilization efforts. So if a mobile banking network has been established, financial flows across the network would be transparent, limiting opportunities for corruption, and increasing law enforcement tools to battle more serious threats such as terrorism financing.

Further, with a functioning banking sector in place, the discovery of large quantities of cash would be a good general indicator of suspicious activity. Today, a Soldier on patrol who encounters a large sum of cash in a private home might conclude that the cash is evidence of suspicious activity, even though in a cash-and-carry economy like Iraq's, the cash could simply be someone's savings. However, with a functioning banking sector, Soldiers on patrol might be able to avoid apprehending law-abiding non-combatants or seizing their funds. Such incidents only degrade the trust and confidence the Army might enjoy with the local population.

Beyond the tactical and operational utility that expeditionary banking provides, there are other strategic objectives served as well.

Quadrennial Defense Review

On 15 April 2008, Secretary of Defense Robert Gates testified before the House Armed Services Committee that he believes "building partner capacity is a vital and enduring military requirement"

U.S. Army, SSG Sean A. Foley

U.S. Army SPCs Graham Mullins and Paul Koop stack cash and other items on the hood of a car during a patrol with Iraqi National Police in Al Doura, Iraq, 5 April 2007.

beyond the current operations in Iraq and Afghanistan. Un-governed and under-governed regions around the world offer havens for non-state actors to gather strength and execute attacks against the United States and its allies. Rather than attempt to neutralize these threats with our own forces, which would require vastly more combat power than the Nation has on hand, Defense Department leaders instead seek to increase American support to friendly governments' military and police forces so that they can influence these areas. The most recent *Quadrennial Defense Review Report* outlines the "critical importance of being organized to work with and through others, and of shifting emphasis from performing tasks ourselves to enabling others."[15]

In shaping Army doctrine and capabilities for future contingencies, the Army should study the experience of current train-and-equip missions in Iraq and Afghanistan. The Army can learn from accounts of Iraqi units suffering high rates of absenteeism while indigenous soldiers and police travel great distances to deliver cash to their families and, while in transit, suffer attacks by insurgents seeking to weaken the nascent force and discourage potential recruits. A practical solution to this problem could be to conduct salary payments of indigenous soldiers and police by money transfer enabled by expeditionary banking. This would keep government employees off the road and within the relatively safer confines of their units. The contributions expeditionary banking could make to the strategy are manifest. However, there are still other reasons to study the impact of cash on Army operations.

Improved Stewardship

The well-publicized irregularities identified in Kuwait contracting operations last year prompted Army leaders to conduct a comprehensive review and implement immediate and ongoing contracting reforms. Expeditionary banking would support many of these reforms as the automated records-keeping capability inherent to EFT improves transparency and supports audit of contracts and disbursements. Indeed, EFT and mobile-banking-enabled money transfers deliver automated record keeping to the battlefield.

However, mandating EFT and bringing it to the battlefield would also improve force protection for Army finance Soldiers. The $1.5 billion of cash the Army transports annually in cargo aircraft on the battlefield has resulted in nearly one million cash payments since 2003.[16] This heavy logistical burden endangers Soldiers, both in the air and on the ground, transporting required cash to commanders at forward operating bases and combat outposts.

Conclusion

There are some encouraging developments. The Department of Defense has undertaken several initiatives to revitalize the Iraqi economy, including efforts to develop Iraq's financial infrastructure and private banking.[17] The Army supports these initiatives, but it will be important that the Army learn the right lessons from them.

On one hand, it is encouraging that, after five years of operations in Iraq, commanders are beginning to de-emphasize cash in favor of EFT, particularly local-denominated EFT.[18] On the other hand, there is a risk that in future contingencies the Army could repeat the process of handling bulky cash, ultimately becoming a victim of its own success, as the burden to distribute the cash increases. In that case, the Army would have drawn an incomplete lesson from today's experience, and this would be a failure to recognize EFT and mobile banking for their own intrinsic tactical, operational, and strategic value.

Rather, recall that the Army was responsible for spending enough money in Iraq to account for 20 percent of official Iraqi GDP across 2003 to 2007. The challenge for the Army is to make the necessary alignments between finance doctrine and contracting doctrine to develop Army purchasing power as a non-kinetic weapon to deliver banking to the battlefield and then link this doctrine to its operational counterinsurgency doctrine.

Army Vice Chief of Staff General Peter W. Chiarelli has written of the capabilities gap between the capabilities the Nation needs and the combined resources the U.S. government can apply.[19] The Army, with the direct support of the Department of Treasury and Department of Defense, and with minimal impact on its traditional roles and missions and culture, can create a banking system wherever it is asked to go, made possible not by infringing upon the traditional missions of other Federal agencies but rather by its local economic leverage as a market participant.

Expeditionary banking could do for modern battlefields like Iraq and Afghanistan what the telegraph and the Federal Reserve Act of 1913 did for the Wild West of the United States: remove incentives for violent theft and create opportunities for economic prosperity and job creation. Near total reliance on cash would be replaced by a more balanced approach between banking and cash as a convenient medium for very small scale economic activity far away from the battlefield, with commanders assessing just how far away from the battlefield those activities occur in time and space.

The challenge for the Army is to make the necessary alignments between finance doctrine and contracting doctrine to develop Army purchasing power as a non-kinetic weapon to deliver banking to the battlefield and then link this doctrine to its operational counterinsurgency doctrine.

Only ground commanders know which neighborhood is a battlefield and which neighborhood is not. When commanders deem that expeditionary banking is appropriate for their areas of responsibility, they must have the tools to make the transition quickly. Preparations must begin now. The tools must be understood before they can be used. More study is necessary, but it seems clear that modern banking, particularly mobile banking, has a tangible security effect.

That is, it has military application. ***MR***

NOTES

1. U.S. Army Finance Command, *Finance Activity in Operation Iraqi Freedom* (4 June 2008).
2. T.J. Stiles, *Jesse James: Last Rebel of the Civil War* (New York: Alfred A. Knopf, 2002), 168-70.
3. Ibid., 3.
4. James was the subject of much reporting and editorializing by John Newman Edwards. Edwards was an editor on the staff of the *Kansas City Times* and a "voice of the Confederate wing of the Democratic Party . . . and a close friend of Jesse James . . . [who] largely shaped the outlaw's public image and political strategy, spearheading the former Confederates' rise to political and cultural preeminence in the 1870's." State Historical Society of Missouri, Columbia.
5. Stiles, 168-70.
6. The 5 June 2008 Federal Reserve Statistical Release, *Monthly Historical Money Stock Tables*, indicates that, today, the opposite is true. As of December 2007, currency comprises just 10 percent of the U.S. money supply, but this is not because the alternative is barter.
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14. Central Intelligence Agency, *World Fact Book* (10 June 2008).
15. U.S. Department of Defense, *Quadrennial Defense Review Report*, 6 February 2008.
16. U.S. Army Finance Command (4 June 2008).
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PLANNING FULL SPECTRUM OPERATIONS

Implications of FM 3-0 on Planning Doctrine

Major Glenn A. Henke, U.S. Army

Since war contains a host of interactions, since the whole series of engagements is, strictly speaking, linked together, since in every victory there is a culminating point beyond which lies the reality of losses and defeats—in view of all these intrinsic characteristics of war, we say there is only one result that counts: final victory. Until then, nothing is decided, nothing won, and nothing lost.[1]

—Carl von Clausewitz

DURING THE PERIOD between the World Wars, the German army experimented with armored formations and ultimately invented a new kind of warfare based on closely integrating combined arms to a degree scarcely imaginable in 1918. While the British army also experimented with this new form of warfare, it was unable to achieve the same level of effectiveness and integration as the German army. There are many reasons for this disparity in results, but one key factor was that the Germans were more unsentimental about preserving existing ways of fighting than the British, due in large part to the outcome of World War I. By ignoring existing mind-sets and paradigms such as regiments and horse cavalry, Germany discarded both the institutions and organizations that did not suit the new combined arms form of warfare. This unsentimental mind-set also extended to doctrine, which the Germans modified after examining the evidence provided by battlefield performance and experimentation.

Today the U.S. Army stands at a similar crossroads with the recent publication of Field Manual (FM) 3-0, *Operations*. Like Germany during the interwar period, current operations have driven America's Army to overhaul doctrine, tactics, and organizations, leaving no "sacred cows" untouched, including the primacy of divisions or command-centric officer career paths. The Army's concept of full spectrum operations as outlined in the latest version of FM 3-0 is partially intended to advance Army doctrine beyond thinking primarily in terms of force-on-force engagements, so we must ensure that our planning paradigms are truly in line with full spectrum operations. While it is one thing to understand the complexities involved with planning and integrating offense, defense, and stability missions in a specific point in time, it is another thing entirely to understand how this integration spans the entire operation from Phase I (deter) to Phase V (enable civil authority).[2] As a result, current doctrinal planning processes focus primarily on tactical engagements or a single phase with minimal integration between phases. Campaign planning can address this, but the process is not as systematic as the current Military Decision Making Process (MDMP). Therefore, in order to meet the full intent of FM

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PHOTO: LTC Drew Meyerowich, center, commander, 2d Battalion, 27th Infantry, speaks to his Soldiers during an operation in Zanjaliah, Iraq, 1 February 2007. (U.S. Air Force, MSGT Andy Dunaway)

3-0, we must assess planning doctrine to ensure it is consistent with operations doctrine.

The question is not whether the MDMP is flawed but whether the current thought process adequately addresses the entire spectrum of operations. We could modify the existing process by reformulating step III (course of action development) to look beyond simple ratios of relative combat power to generate options. However, this still fails to capture the dynamic interplay between different stages of an operation. Is the concept of phase-based planning (as opposed to execution) sufficient for full spectrum operations? During the after-action review for a recent Command and General Staff College (CGSC) division-level exercise, a student commented that Phase IV (stability) actually begins in Phase I (deter). While units fighting in Iraq and Afghanistan clearly understand this, we have not yet corrected one of the root causes of the confusion that reigned during April 2003 in the transition to Phase IV. Since we do not have the opportunity to "reboot" these operations and start from scratch, we must transition into the next phase of operations immediately after we obtain our final objective in decisive combat operations. The transitions between phases are the most complicated part of any operation. How do we plan so as to make these transitions seamlessly?[3]

The question is not whether the MDMP is flawed but whether the current thought process adequately addresses the entire spectrum of operations.

The Current Paradigm

Before proceeding, we should analyze the current MDMP to see if the problem is one of process as opposed to paradigm. The Army designed the current MDMP for planning force-on-force operations, which typically occur in Phase II (seize the initiative) and Phase III (dominate). During course of action development, we analyze our combat power in relation to the enemy's, generate options, array our forces, develop a concept of operations, and assign headquarters for task forces.[4] The bias toward force-on-force operations is apparent. While the MDMP is a useful tool in Phases II-III, solutions for Phase IV and V tend to be ad hoc, and other than their anticipated end states, little in the existing process links the phases together. If Phase IV truly begins in Phase I, what tools synchronize effects across the full spectrum of an operation?

In addition to the concept of full spectrum operations, the new FM 3-0 introduces lines of effort (LOE), previously known as logical lines of operation.[5] Most planners familiar with campaign planning are well versed in the idea of multiple lines of operation. General Tommy Franks's "lines and slices" diagram is a famous example; the lines of operation detailed by Lieutenant General Peter Chiarelli while commanding the 1st Cavalry Division during OIF II is another. According to FM 3-0, lines of effort "typically focus on integrating the effects of military operations with those of other instruments of national power to support the broader effort."[6]

Commanders and planners can combine lines of effort with LLOs, since LLOs should not extend the operational design beyond decisive combat operations, which usually culminate in Phase III.[7] Unfortunately, FM 3-0 does not provide an example of this approach. The closest example in current doctrine is in Joint Publication 5-0, *Joint Operation Planning*, which also includes some linkages between lines of operation.

Courses of Action

Based on this knowledge of both MDMP and campaign design, we can conclude that while the current planning paradigm embodied in MDMP is well-suited for planning individual phases or specific actions, it is not suited for planning across the full spectrum of an operation. Systematic and doctrinal campaign planning tools have not achieved the same level of maturity, refinement, and ubiquity as the traditional military decision making process. This leads us to our own courses of action regarding the current paradigm.

The first course of action (COA) is "no change," which is to leave the current system as is. While this is admittedly the "throwaway" COA for the purposes of this article, one can reasonably argue that the current process has been successful in the past and that changing it is both complicated and could require a complete overhaul of Joint doctrine and existing OPLANs. This paper does not address

these considerations but acknowledges the likelihood of second- and third-order effects on Joint operations stemming from substantive changes in Army doctrine, especially for a Joint headquarters built around a standing Army headquarters.

The second course of action is to: 1) modify the current MDMP process to develop courses of action by phase, and 2) develop a systemic process to link phases. This COA might be called a "modified MDMP." Critics of this COA could reasonably argue that this should already be done under the current system. However, the turbulent transition into Phase IV of Operation Iraqi Freedom (OIF) leads one to the conclusion this process was either not followed or executed incorrectly. Even if the planners developed a perfect plan for Phase IV, the fact remains that this detailed planning would probably not have begun until sometime during Phase II or III, after which it would have been too late to shape the battlefield to support Phase IV. This tardiness is especially important with regard to targeting, since targeting boards need to know whether the intended target, such as a bridge or power station, will be needed in the future. While it is tempting to think that we have learned our lesson and rely on experience and tactics, techniques, and procedures, this is not the basis for sound doctrine, which needs the ability to survive outside a specific time and context. Additionally, this COA does not address the fact that while the current MDMP can successfully plan Phase II and III operations, we still lack systemic tools for planning Phase IV and V operations.

This leads us to the third and recommended course of action. This COA is "abandon phase-based planning," that is, we cease planning operations by sequential phases (with some overlap during the transitions) and instead plan by LLO and LOE that run simultaneously.

Abandoning the Phasing Construct

Since most commanders and planners know that several phases of an operation may be executed simultaneously, changing the existing planning paradigm to a LLO/LOE-based paradigm is more of an evolutionary than revolutionary change. To extend our new operations doctrine into our planning doctrine and meet the full meaning of FM 3-0, we must develop planning doctrine that identifies the linkages between phases and actions. We are already familiar with this idea when we consider the concepts of "shaping" and "decisive" operations. For instance, in a brigade attack, there are shaping operations, such as a spoiling attack, that are linked to a decisive operation, and the decisive operation cannot occur until those shaping operations are successful. This linked concept is also used in decision support templates, since certain information must be known and certain events must transpire in order to make the appropriate decision. Planning based on lines of operation and effort uses a similar model.

The interaction between lines and events is the key distinguishing feature for LLO/LOE-based planning. If planners do not address this interaction, we have not resolved the core problem we set out to remedy. Since any given event or task may be shaped by some other event or task (just as a shaping operation links to a decisive operation), it is reasonable to assume that these tasks may exist in different lines of operation or effort. This is where a phase-based paradigm fails us, since it looks at sequences of operations instead of across the full spectrum of an operation in space and time.

Thinking of events as arranged in time with actions that support each LOE must account for the linkages between each action. For instance, what

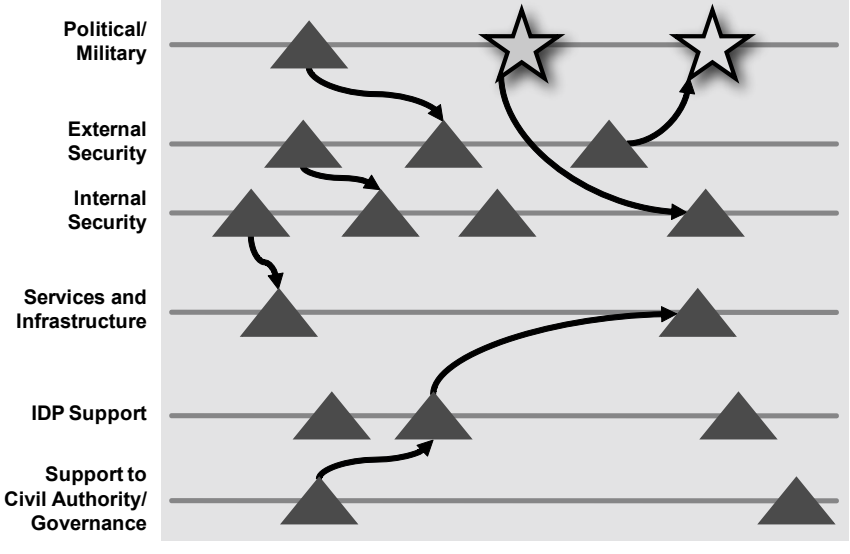

Figure 1. Linked LLO/LOE.

external and internal security, service, infrastructure, and support to civil authority and governance actions are linked to tasks such as "support formal internally displaced person (IDP) resettlement?" Linkages among all these actions will impinge on timing for the best outcomes.

With this complexity in mind, we can develop a concept for LLO/LOE-based planning. Instead of breaking the operation into phases, we visualize the entire operation along lines. The first step is to view the entire operation from start to finish and not by phase. The next step is to identify the actual lines of operation and effort, even if most actions in a given line occur at a specific point in time. Using a generic scenario similar to OIF or Operation Enduring Freedom (OEF) as a prototype, we can envision nine lines of effort and operation. The first is called "shaping," Phase 0 in the Joint doctrine, followed by an LOE called "deterrence." The next LOE is "project force." This LOE extends through the entire operation and encompasses reception, staging, onward movement, and integration (RSOI) and subsequent deployment and redeployment operations (such as OIF/OEF rotations).

We now begin to use lines of operation (as opposed to lines of effort). Phase II and III are "dominate" and "internal security." At this point, we return to the term "lines of effort" and use some FM 3-24 terms, such as "essential services," "governance," and "economic/infrastructure development." However, this does not address the actions and interactions at the strategic and national levels, which necessitates a political/military (POL/MIL) line. This line includes policy decisions and anticipated (or essential) strategic guidance and policy enabled by actions in other lines.

LOE: POL/MIL
LOE: Shaping
LOE: Deterrence
LOE: Project Force
LOE: Dominate
LOE: Internal Security
LOE: Essential Services
LOE: Governance
LOE: Economic/Infrastructure Development

Figure 2. Lines of effort.

Once we have identified the lines, we must identify the tasks. During the planning for Phase IV IDP resettlement in the CGSC division exercise, the planning staff used an ad hoc process, brainstorming the tasks for each line and then working backward through time to determine which events linked to other events. The staff repeated the process on each line, working forward through time. By conducting this "dual pass" approach, the planners could determine when they needed guidance from the POL/MIL line to identify decisions at this level.

While the example mentioned above only focused on one phase, one can extend this process to an entire operation by starting with the end state and working backwards to the beginning of the operation. By extending this paradigm to encompass the full spectrum of an operation, commanders and planners can identify linkages between different points in the operation and allow targeting processes to support the ultimate end state. Since everything in a military operation should work toward the end state, we must be cognizant of this at every phase of the operation.

Conclusion and Implications

Critics of this approach might say that plans based on LLO and LOE are more appropriate for operational or campaign planning, which are inherently joint and not subject to Army doctrine. While this may be true, it is important to keep in mind that we are looking to solve a problem based on the implications of full spectrum operations. To synchronize offense, defense, and stability effectively throughout the entire operation, we must envision the entire operation. We should use this type of planning model for all operations, not just campaigns. We must develop tools for commanders to predict and manage second- and third-order effects.

To synchronize offense, defense, and stability effectively throughout the entire operation, we must envision the entire operation.

The use of LLO/LOE-based planning requires a wholesale reevaluation of the current MDMP. However, developing the specific processes to plan is beyond the scope of this paper. Instead, like Germany during the interwar period, we must first determine what aspects of our doctrine are no longer suitable. This aspect of German innovation was probably the most important factor to their early World War II battlefield successes. They based their doctrine on experimentation, battlefield performance, and a comprehensive understanding of the results from the past war.[8] Our current planning doctrine no longer supports the reality of full spectrum operations because it does not allow us to plan across the full spectrum of an operation. The only way to do so is to envision the plan from its conception to the commander's end state. By basing our plans on the phases of execution, we can desynchronize subsequent phases from future requirements. Moreover, this paradigm does not take into account that actions in earlier phases may be crucial for ultimate success. By abandoning phase-based planning in favor of an approach based on lines of effort and operation, we can address an entire operation and minimize the difficulty in transitioning between its phases.

I do not recommend that we abandon phases as a method of synchronizing execution. There is clearly a place for delineating stages of an operation, if the phases are built around key events or logical points of transition from one stage to another. Every operation must react to events on the ground caused by enemy and friendly forces, and every plan should be flexible enough to deal with unforeseen events. However, FM 3-0 "reflects Army thinking in a complex period of prolonged conflicts and opportunities." Our planning processes must move forward to meet this challenge.[9] ***MR***

Our current planning doctrine no longer supports the reality of full spectrum operations because it does not allow us to plan across the full spectrum of an operation.

NOTES

1. Carl von Clausewitz, *On War,* trans. Peter Paret (New York: Alfred A. Knopf, 1993), book 8, ch. 3, 704.
2. Joint Publication 5-0, *Joint Operations Planning*, 26 December 2006, IV-35. This article uses the Joint Operations Phasing Model as a point of departure. While not prescriptive, it provides a framework for operational design and is commonly understood.
3. This phrase was often repeated by General Bantz Craddock when he commanded 1st Infantry Division.
4. U.S. Army Field Manual (FM) 5-0, *Army Plans and Orders Production*, (Washington, DC: Government Printing Office, January 2005), figure 3-8, 3-28.
5. FM 3-0, *Operations*, (Washington, DC: Government Printing Office, February 2008), 6-12.
6. Ibid., 6-13.
7. Ibid., 6-14.
8. Williamson Murray and Allan R. Millet, *Military Innovation in the Interwar Period*, (New York: Cambridge University Press, 2006), 41.
9. FM 3-0, viii.

Relooking Unit Cohesion: A SENSEMAKING APPROACH

Major Geoff Van Epps, U.S. Army

My first wish would be that my Military family, and the whole Army, should consider themselves as a band of brothers, willing and ready to die for each other.

—George Washington, writing to Henry Knox on 21 October 1798[1]

WHEN DID THE ARMY STOP emphasizing the importance of unit cohesion? As the excerpt from George Washington's letter to the first secretary of war of the United States illustrates, cohesion has been a fundamental objective for Army leaders since the founding of the institution. Yet current Army leadership doctrine virtually overlooks the importance of unit cohesion. This lapse is both surprising and troubling, particularly in a time of decentralized operations by small units often spread over great distances, on remote patrols, or manning secluded combat outposts, vulnerable to being isolated and overrun. The Soldiers in these units count on nothing with certainty except their fellow Soldiers immediately around them.[2]

Unit cohesion is an important consideration in the best of times. In the worst of times—for an encircled unit, low on supplies, out of communication, beset by foul weather, and facing overwhelming odds—unit cohesion may be the one attribute enabling it to hang on and survive until it can break out or be relieved. The "guarantees" offered by persistent intelligence, surveillance, and reconnaissance (ISR), modern communications, and other technologies make it tempting to conclude that it is impossible for American units to be cut off and destroyed. But we ignore this threat at our own peril, especially in light of the grave strategic consequences that would accompany such a disaster.

The 2006 Field Manual (FM) 6-22, *Army Leadership*, is an improvement over its predecessor, particularly in its embrace of the ambiguity and uncertainty of the contemporary operating environment. Unfortunately, the FM also continues the slow erosion of emphasis on unit cohesion's significance in doctrine. The previous 1999 edition of *Army Leadership* dedicated six pages to discussing team building and unit cohesion at the direct, organizational levels of leadership. By contrast, the latest edition contains only four short paragraphs on this important topic.[3]

Worse, the current edition completes a trend evinced in the 1999 edition by conflating teamwork and cohesion. It addresses both terms in the same section of the manual without defining either term or distinguishing between the two. Yet teamwork and cohesion, while closely related, are clearly distinct.

Teamwork is the collaboration or coordinated effort of a group of Soldiers toward common goals or objectives. Cohesion, on the other hand, is both more abstract and more basic. Cohesion means a bonding together of an organization or unit's members in such a way as to sustain their will and commitment to each other, the group, and the mission.[4] Cohesion binds an

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PHOTO: SPC Daniel Brooks and a fellow Soldier take a minute of downtime after gearing up for a combined dismounted patrol with Iraqi police in the Ghazaliya district of Baghdad, Iraq, 17 July 2008. (U.S. Army, SPC Charles W. Gill)

organization together and enables it to function as a unified, integrated unit. Cohesion allows teamwork to occur under difficult conditions.

The seeming unimportance of cohesion in the latest FM is perhaps best reflected in the following understatement: "To operate effectively, teams, units, and organizations need to work together for common Army Values and task and mission objectives."[5] Soldiers deserve a better explanation. They need a deeper understanding of cohesion.

The rest of this article addresses steps the Army can take toward that end. I will outline the modern evolution of the Army's interest in cohesion and then introduce the ideas of Karl Weick, whose research into the connection between sensemaking and cohesion provides a more appropriate way of discussing it given today's ostensibly more complex and uncertain environments. In the last section of the article, I show how Weick's ideas help explain the differing fates of two U.S. units attacked by the Chinese in North Korea in late 1950.

The Rise and Decline of Interest in Cohesion

Until early in the last century, conventional wisdom held that panic caused military units to disintegrate. In the 1920s, the father of psychoanalysis, Sigmund Freud, turned that notion on its head through his studies of group psychology. Freud argued that the loss of cohesion incites enough panic that "none of the orders given by superiors are any longer listened to, and that each individual is only solicitous on his own account, and without any consideration for the rest. The mutual ties have ceased to exist, and a gigantic and senseless fear is set free."[6] Although novel at the time, Freud's insight has become part of the Army's understanding of how units function: when cohesion breaks down, panic sets in, and each Soldier is left to fend for himself.

Studies of combat units in World War II reinforce this perspective. In his classic, *Men Against Fire,* S.L.A. Marshall declares, "I hold it to be one of the simplest truths of war that the thing which enables an infantry Soldier to keep going with his weapon is the near presence or the presumed presence of a comrade... He would rather be unarmed and with comrades around him than altogether alone, though possessing the most perfect, quick-firing weapon."[7] In *The American Soldier,* a more scientific investigation of the attitudes of combat Soldiers in the European Theater, Samuel Stouffer found a strong link between the loyalty that Soldiers felt toward one another and their level of confidence in their comrades' abilities under combat conditions.[8]

Consistent with this point of view, leaders from the interwar period forward trained units in order to, among other things, build confidence and cohesion among their members. This paradigm was reinforced in the 1970s and particularly during the Vietnam War, when the individual replacement system was seen as disrupting cohesion and causing a decline in unit performance. In 1981, the Army instituted a unit manning system, whose key feature was COHORT (cohesion, operational readiness, and training) units that formed and trained together for three-year cycles. The idea of combat units based around a cohesive nucleus of Soldiers was a promising one, although officers and noncommissioned officers were not stabilized with the unit. However, by 1990 the Army deemed the COHORT experiment a failure and returned to individual manning.[9] Cohesion remained important, but the attempt to institutionalize its development fell out of vogue. A U.S. Army War College study concluded that "cohesion among Soldiers remains primarily the by-product of good leadership combined with important, fulfilling work."[10]

Around the time the COHORT system fell short of expectations in performance and building unit cohesion, the idea of "sensemaking" began to emerge in academic literature to complement discussions of organizational design and structure.

Sensemaking and the Collapse of Organizations

Sociologist Karl Weick was one of the first scholars to apply the concept of sensemaking to organizations operating in complex or ambiguous

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environments. Weick argued that the ability to construct a coherent, shared explanation for events and circumstances enabled organizations to continue to function during times of great uncertainty. "The basic idea of sensemaking," he wrote, "is that reality is an ongoing accomplishment that emerges from efforts to create order and make retrospective sense of what occurs. People try to make things rationally accountable to themselves and others."[11] In other words, people and organizations use shared mental models to deal with disorder and ambiguity.[12] Weick explored this idea in order to determine what held organizations together and, conversely, what caused them to unravel during crises. He concluded, "What holds organization in place may be more tenuous than we realize."[13]

Weick determined that organizations are especially vulnerable to a collapse of sensemaking as a result of fundamentally unexpected or incomprehensible events. The low probability of such an incident occurring causes the organization and its members to be caught by surprise when it does, shattering their individual and collective understanding of the situation. If members of the organization do not quickly recreate a shared reality or adopt a new mental model to make sense of the chaos surrounding them, they will cease to function as a unified team. The organization's structure serves as a foundation to anchor sensemaking because it provides roles and interlocking routines that tie the people together into a team and keep them functioning while they rebuild a shared understanding of the situation they face. Sensemaking and structure are interrelated, enable cohesion, and allow an organization to keep functioning in the face of chaos.[14]

Weick notably applied this concept to analyze the deaths of 13 smokejumpers fighting a fire in Mann Gulch, Montana, on 5 August 1949. The event bears striking similarities to a disastrous military patrol by a platoon or squad. Fifteen smokejumpers, led by foreman "Wag" Dodge, parachuted onto the south side of Mann Gulch to meet a forest ranger who had been fighting the fire alone for about four hours. They had been told to expect a "ten o'clock fire"—one they could surround and completely isolate by 1000 hours the next morning. As they gathered up the supplies they parachuted in with, they discovered their radio equipment had been destroyed in the landing. After eating a brief dinner, the crew marched along the hillside toward the river, when Dodge noticed the fire had suddenly crossed the river and was moving uphill toward them. Dodge ordered the crew to turn around and headed them up the hill toward the ridge at the top. Calculating the fast-moving fire would catch the smokejumpers before they reached the safety of the ridgeline, Dodge ordered the crew to drop their tools, lit a small fire in front of the group, and ordered them all to lie down in the area he had just burned. No one obeyed. The entire crew ran for the ridge. Two smokejumpers made it to the top unharmed. One more made it to the top badly burned and died the next day. Dodge survived by lying in the area burned by his escape fire, as the main fire moved around and over it. The other 12 members of the crew were overcome by the main fire and perished in flames that jumped between the ridgeline and the area burned bare by Dodge's escape fire.[15]

Weick's analysis attributes the disaster to the twin collapses of sensemaking and structure in the smokejumper crew. First, he argues, the team experienced what he labels a "cosmology episode" when they ended up fleeing for their lives when they had only expected a "ten o'clock fire." Although the term is ungainly, it is important to understand because it signals the death knell of the organization. Weick explains:

…structure serves as a foundation to anchor sensemaking because it provides roles and interlocking routines that tie the people together into a team…

> A cosmology episode occurs when people suddenly and deeply feel that the universe is no longer a rational, orderly system. What makes such an episode so shattering is that both the sense of what is occurring and the means to rebuild that sense collapse together.
>
> Stated more informally, a cosmology episode feels like *vu jàdé*—the opposite of *déjà vu*: I've never been here before, I have no idea where I am, and I have no idea who can help me.[16]

The smokejumpers never understood the threat the fire posed until it was too late. Events like Dodge turning them upslope as the fire jumped the river challenged their shared understanding of "ten o'clock fire" they thought they faced. The minor blaze they anticipated had suddenly become a threat. Their cohesiveness began to disintegrate. When Dodge ordered them to drop their tools, they lost their identity as an organization. What good is a firefighting crew with no equipment? Are they even firefighters anymore? Finally, when Dodge lit a fire in the middle of the only apparent escape route, their collective ability to understand the situation and respond to it disappeared. Lighting escape fires was an unknown technique at that time, and Dodge's actions were inconsistent with the crew's grasp of the situation. The crew had ceased to exist. It was every man for himself.

Weick's final analysis shows how the simultaneous collapse of structure and sensemaking led to disintegration of cohesion and, ultimately, disaster:

> [The fire crew] faced . . . the feeling that their old labels were no longer working. They were outstripping their past experience and were not sure either what was up or who they were.
>
> As the ties weakened, the sense of danger increased, and the means to cope became more primitive. The world rapidly shifted from cosmos to chaos as it became emptied of order and rationality. . .
>
> As their group disintegrated, the smokejumpers became more frightened, stopped thinking sooner, pulled apart even more, and in doing so, lost a leader-follower relationship as well as access to the novel ideas of other people who are a lot like them. As these relationships disappeared, individuals reverted to primitive tendencies of flight.[17]

Five days later, the efforts of 450 firefighters finally brought the Mann Gulch fire under control. Although the Forest Service had classified it as a Class C Fire, signifying an extent of between 10 and 99 acres, at the time the crew parachuted in to fight it, it was clearly not a "ten o'clock fire."[18] Deprived of external communications when their radio was destroyed during the jump, the smokejumpers could only rely on the information they were given before the mission to try to understand the danger they faced.

The next section of this paper will briefly examine two military units faced with conditions similar to those at Mann Gulch. Their abilities to maintain sensemaking and structure led to vastly different outcomes.

Sensemaking and Structure at Chosin Reservoir

In late fall of 1950, the American X Corps faced relatively light resistance in a rapid advance through North Korea toward the Chinese border on the Yalu River. Despite the winter weather and restrictive terrain, corps commander Ned Almond ordered a new offensive to begin on 27 November. This "ill-advised and unfortunate operation" was predicated on the assumption of continued light opposition in the corps zone.[19]

To the west of Chosin Reservoir, the 1st Marine Division's three reinforced regiments inched their way up the one road of any significance, pausing to consolidate after each successive move. On the night of 27 November, after hours of painfully slow progress, the division halted with the 5th and 7th Marine Regiments arrayed around the town of Yudam-ni and the 1st Marine Regiment securing key terrain on the main supply route in the division's rear.[20]

On the eastern shore of the reservoir, the 31st Regimental Combat Team (RCT) was the lead unit of the Army's 7th Infantry Division. The unit spent 27 November arriving at their attack position along the main route east of the reservoir and waiting for the arrival of their third infantry battalion, which lagged behind due to transportation delays. The regimental commander, Colonel Allan MacLean, confirmed that the regiment would attack to the north the following morning with whatever forces

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Astonished Marines of the 5th and 7th Regiments, who hurled back a surprise onslaught by three Chinese communist divisions, hear that they are to withdraw, Hagaru-ri, near Chosin Reservoir, ca. December 1950.

he had at his disposal. Consequently, the regiment did not prepare mutually supporting defensive positions or establish landline communication between units. MacLean dispatched the regimental intelligence and reconnaissance (I&R) platoon to scout the route ahead, and in an ominous development, it disappeared, never to be heard from again.[21]

As night fell, both the Marines and the 31st RCT hunkered down, intending to attack north the following morning. Signs of an impending Chinese assault were evident, but the Americans largely misread them. Then, that night, 27 November, three Chinese divisions attacked the 1st Marine Division west of Chosin Reservoir, and the 80th Chinese Division hit the 31st Regimental Combat Team on the reservoir's eastern shore. On both sides of the reservoir, the Chinese achieved nearly complete surprise, swarmed out of the hills, overran outposts, penetrated unit perimeters, and wreaked havoc. In desperate, often hand-to-hand fighting, the Americans fought off the Chinese attacks. With the break of day, the Chinese melted back into the hills and the U.S. units were left to tend to their casualties and figure out what to do next.[22]

Later in the morning of 28 November, Lieutenant General Almond flew forward to assess the situation for himself. After this, the fates of the two units—the 1st Marine Division and the Army's 31st Regimental Combat Team—began to diverge. Almond conferred with the commander of the 1st Marine Division, Major General O.P. Smith, who informed Almond that based on the previous night's intense action, he had cancelled the division attack northward. Smith's regiments were intact, but isolated and in jeopardy. He intended to order the 5th and 7th Marines to constrict their perimeters, hold their positions, and attack to the south to regain contact with the remainder of the division along the main supply route.[23]

Almond then flew to visit Colonel MacLean and the 31st RCT. MacLean had spent the night fighting alongside his lead battalion, the 1st Battalion, 32d Infantry, which suffered about 100 casualties, but which he judged to be in "pretty good shape." He had no word on the fate of his second infantry unit, 3d Battalion, 31st Infantry, which had also been hit hard the previous night. Nor did he have any news about when his third infantry battalion, still in transit, might arrive. Unaware that Chinese action prevented his regimental tank company from joining the regiment's main body, MacLean was "reasonably optimistic" about the situation and did not object when Almond told him the enemy was "nothing more than the remnants of Chinese divisions fleeing north." "We're still attacking and we're going all the way to the Yalu," Almond said. "Don't let a bunch of Chinese laundrymen stop you."[24]

But by nightfall on 28 November, the 1st Marine Division and 31st Regimental Combat Team held very different views of the tactical situation. The Marines had cancelled their offensive operations and focused on consolidating their positions on defensible terrain and reopening their lines of communication. The 31st RCT's orders remained to attack northward upon the arrival of its third infantry battalion, still expected at any moment.

During the night of 28-29 November, the Chinese attacked again and the results were the same—high casualties on both sides during desperate fighting. Still the Americans held. Colonel MacLean of the 31st RCT came to the decision that the regiment needed to consolidate temporarily into a single perimeter until his last infantry battalion and his tanks arrived and he could resume the attack. Thus, early on the morning of 29 November, MacLean ordered the "temporary withdrawal" of 1-32 Infantry, his lead battalion, into the perimeter with 3-31 Infantry and other regimental units. The Soldiers would not destroy their equipment; they were ordered to remove critical parts and carry those parts with them so they could repair the equipment for use in the attack the following day.[25]

The withdrawal of 1-32 Infantry into the 3-31 Infantry perimeter happened, but not without difficulty. 1-32 Infantry fought its way south only to find the 3-31 Infantry situation just as precarious as their own had been. Tragically, MacLean misidentified a column of approaching troops and allowed the Chinese to take him prisoner. The senior battalion commander, Lieutenant Colonel Don Faith of 1-32 Infantry, assumed command of the 31st Regimental Combat Team.[26] Faith waited for help from his division or corps to arrive, but there was none to give. On 30 November, the Assistant Division Commander of the 7th Infantry Division flew into Faith's perimeter to tell him the 31st RCT was on its own. The regiment would have to fight its way back to safety.

By the morning of 1 December, the 31st RCT had survived four consecutive nights of brutal attacks by the Chinese. Its ranks were decimated. Several of the regiment's companies were utterly destroyed. Others had no officers left alive. Supplies and ammunition were critically low. Fatigue and the bitter cold pushed the Soldiers to the limits of human endurance. Faith concluded his men would not withstand another night of Chinese attacks and ordered a breakout. Soldiers would destroy all equipment that could not move. The remaining vehicles would carry the hundreds of serious casualties. Every Soldier who could walk—wounded or not—would fight dismounted.

The 31st RCT got underway around noon. Within minutes, a Marine pilot providing close air support dropped a canister of napalm short, killing several American troops. The situation worsened from there. The RCT had to run a gauntlet of roadblocks and blown bridges under withering enemy fire. Vehicles stopped running. Drivers were killed behind the wheels of their trucks. A Chinese grenade mortally wounded Faith, leaving no clear commander of the unit. The dismounted rear guard began to overtake the trail vehicles of the column, leaving them vulnerable to the pursuing Chinese. The unit began to disintegrate as Soldiers set out on their own across the frozen ice of the reservoir or onto the high ground along the roadway. Ultimately, the formation lost momentum and ground to a halt. Those Soldiers who could still move under their own power headed south toward friendly lines as individuals or in small groups, hoping to avoid the Chinese who stood in their way. Those who could not move were left for dead. The 31st Regimental Combat Team had ceased to exist.[27]

For its part, the 1st Marine Division had its own share of problems. The limited attacks to restore contact between the divisions's scattered elements failed. Nightly Chinese attacks decimated the ranks. On the morning of 1 December, the 5th and 7th Marine Regiments began their own breakout attempt, attacking southward from their consolidated position toward the remainder of the division. They came out as intact units in tactical formations, bringing their jeeps, trucks, trailers, and guns with them. Almost 600 wounded were piled in trucks or strapped across the hoods of jeeps, just as in the 31st RCT. The vehicles had to keep to the road, but infantrymen repeatedly maneuvered to seize the key terrain necessary to secure the force. It took three days of exhausting, bloody fighting, but the Marines managed to sweep aside countless ambushes and roadblocks to reach friendly lines at Hagaru. The 1st Marine Division was intact and had maintained enough combat power to resume its attack to the south three days later, after evacuating thousands of casualties.[28]

Why were the fates of these two units so vastly different? They faced similar tactical circumstances in terms of force ratios, terrain, weather, and resources available. Both the Marines and the 31st RCT enjoyed advantages over the Chinese in automatic weapons, heavy mortars, artillery, and close air support. And both were completely cut off and faced an untenable situation that compelled

them to attempt a breakout to preserve their forces. Traditional explanations do not adequately answer why the Marines survived as a fighting force and the 31st RCT was defeated in detail.

However, by applying the ideas on sensemaking and structure described earlier, one interpretation emerges. The Marines were able to keep their structure and sensemaking ability intact and thereby maintain unit cohesiveness throughout their ordeal. On the other hand, the 31st RCT suffered the twin collapses of both structure and sensemaking, causing the unit to disintegrate into a rabble of small groups and individuals. Evidence from members of both units supports this perspective.

Within the 1st Marine Division, there was skepticism from the outset concerning the claims that the X Corps' attack to the Yalu River would face nothing but light resistance. One account describes how "Marines, from O.P. Smith on down, were exceedingly reluctant to proceed with the offensive" and how the Marine attack that began on 27 November was "unenthusiastic."[29] The caution that accompanied this skepticism meant the Marines were better prepared both tactically and mentally for the Chinese onslaught on the night of 27 November. Smith, the division commander, immediately cancelled the scheduled attack, thus abruptly signaling to his entire division that the situation had changed drastically.

Smith and his division leaders intuitively began to refine the collective understanding of the situation they faced, a key part of sensemaking. Lieutenant Colonel Ray Murray, the commander of the 5th Marine Regiment, said of his response to the heavy Chinese attack, "I personally felt in a state of shock. My first fight was within myself. I had to rebuild that emptiness of spirit," an apt description of the process of finding a mental model to explain the surprise that had befallen him.[30] The 5th and 7th Marines tightened their perimeters and tried to restore contact with the remainder of the division. When they could not, it became clear they would have to break out.

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Major General Smith explained how he attempted to communicate his new understanding of the situation to his division through tactical orders and up the chain of command to X Corps: "For two days, we received no orders from X Corps to withdraw from Yudam-ni. Apparently, they were stunned, just couldn't believe the Chinese had attacked in force."[31] But the Marines had quickly and effectively made sense of the situation, even though their higher headquarters continued to operate using a broken paradigm. The Marines' ability to quickly grasp the new situation they faced allowed them to develop a plan that suited it and kept the structure of the organization intact. They would consolidate their available forces, keep all of their vehicles and equipment functioning, employ their units in the sort of tactical maneuver for which they were designed, and fight for survival.

Unfortunately, the 31st Regimental Combat Team did not achieve similar success in grappling with the changing conditions. The 31st RCT moved into positions on the eastern edge of Chosin Reservoir with none of the healthy skepticism of the Marines. On 26 November, Lieutenant Colonel Faith misread the tactical picture and told his division commander that his battalion could attack north by itself the following day if the division could loan him a platoon of four tanks. Even when the entire regimental I&R platoon vanished without a trace on 27 November, Faith and his regimental commander, Colonel MacLean, showed no indication they understood the danger they faced.

On 28 November, after suffering heavy casualties the night before, MacLean agreed to the corps commander's order that the regiment would begin its attack the next morning. It took a second night of savage fighting against the Chinese on 28 November to convince MacLean to withdraw 1-32 Infantry to consolidate the entire regiment at one location, and even then, he showed a poor understanding of the situation by ordering the disabling (rather than the destruction) of equipment as part of the "temporary" withdrawal. Conditions were changing faster than the unit's ability to make sense of the situation. Then the unit's structure began to unravel as well, plunging the 31st RCT into a textbook "cosmology episode."

Casualties among key leaders mounted during the initial Chinese attacks—a handful of company commanders and platoon leaders killed the first night, along with two battalion commanders wounded. The Chinese killed or wounded still more officers during the subsequent fighting, and then captured MacLean himself. Faith consolidated the RCT into one perimeter, but never retracted the order to be prepared to transition to the attack. This, of course, made little sense to Soldiers who had just spent three nights fighting for their lives against overwhelming numbers of attacking Chinese, who killed still more officers and noncommissioned officers during the fourth night of fighting.

Suddenly, on 1 December, the same Soldiers who had been repeatedly told they were going to resume the attack at any moment were told that the situation was hopeless and a breakout was necessary. They had already left much vital equipment behind when the regiment consolidated days before. The order to break out was inconsistent with what they had been told earlier, but their discipline and survival instincts allowed them to initiate the attempt. As the breakout convoy lurched forward, more leaders fell. Captains, and then finally lieutenants, commanded the remnants of battalions. The Marine aircraft accidentally dropped napalm on the convoy. Repeated delays in order to clear roadblocks and bypass downed bridges made the operation look more like a traffic jam than a breakout attempt.

Then Lieutenant Colonel Faith was killed. There was no one else left to explain the plan to the unit, and no internal communications available at that point anyway—nor any reason to suppress the instinct to flee. A historian has described the unit's cohesion at this point: "Virtually all the officers who tried to get the rank-and-file to follow them . . . commented on the reluctance, the surly unwillingness of the men to do so, and many men who were forced to act, soon deserted the effort. . . The men were no longer normal Soldiers. They were worn out; they no longer cared. All they had left was individual instinct for survival."[32] In the words of a survivor from the 31st RCT, "The chain of command disappeared. It was every man for himself."[33] The unit had abandoned much of its equipment, which contributed to its loss of identity as a fighting force. The chain of command was gone, and so was the cohesion that had held the unit together. Like the smokejumper crew at Mann Gulch, the 31st RCT had fallen victim to the collapse of sensemaking and structure.

Conclusion

The conduct of warfare has changed substantially since the savage battles near Chosin Reservoir in 1950. Technological, informational, and organizational innovations offer new means of waging war against our nation's enemies. Yet some aspects of warfare remain immutable, particularly its human dimension. While we have been fortunate in recent years not to have experienced a disaster on the scale of Chosin, the demands of the modern battlefield compel the Army to regularly place small units in remote locations where they are vulnerable to the same sort of isolation, danger, complexity, and ambiguity that the 1st Marine Division and the 31st Regimental Combat Team faced in late 1950. When technology fails or the enemy surprises us, human factors—particularly the cohesion that binds a unit together—may determine the unit's survival or destruction.

Understanding and fostering unit cohesion remain vitally important in today's operating environments, and Army doctrine should reflect that importance. The Army should update its views on unit cohesion, not cast them aside as useless or antiquated. It should incorporate new views, such as Weick's thoughts on sensemaking and structure, to flesh out the topic and restore the Army's traditional emphasis on such a critical subject. ***MR***

NOTES

1. George Washington, *The Writings of George Washington*, vol. XI, Jared Sparks, ed. (New York: Harper and Brothers, 1848), 329.

2. For a harrowing account of an American patrol in Iraq in this very situation, see Jeff Emanual's article "The Longest Morning" from the November 2007 edition of *The American Spectator,* available online at <www.spectator.org/dsp_article.asp?art_id=12233>.

3. The bulk of the coverage in the 1999 edition is contained in paragraphs 5-102 to 5-119 and 6-132 to 6-139. In the 2006 version, the discussion is limited to paragraphs 8-23 to 8-26.

4. Defense Management Study Group on Military Cohesion, *Cohesion in the U.S. Military* (Washington, DC: National Defense University Press, 1984), ix. For an overview of the various definitions available and the ongoing debates in the literature (horizontal vs. vertical cohesion, social vs. task cohesion), see Robert McCoun, "What is Known about Unit Cohesion and Military Performance," in *Sexual Orientation and U.S. Military Personnel Policy: Options and Assessment*, National Defense Research Institute (Santa Monica: RAND, 1993), 283-331.

5. U.S. Army Field Manual 6-22, *Army Leadership: Competent, Confident and Agile* (Washington, DC: U.S. Government Printing Office, 2006), 8-6.

6. Sigmund Freud, *Group Psychology and the Analysis of the Ego* (New York: Norton 1959), 28.

7. S.L.A. Marshall, *Men Against Fire* (New York: William Morrow, 1942), 42-43.

8. Samuel Stouffer, et al, *Studies in Social Psychology in World War II: The*

American Soldier (Princeton: Princeton University Press, 1949).

9. McCoun, "What is Known about Unit Cohesion and Military Performance," 300-1.

10. Kenneth C. Scull, "Cohesion: What We Learned from COHORT," U.S. Army War College Study Project (2 April 1990), 24.

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12. Christopher R. Paparone, "Strategies Gone Wild? Implications for Resourcing the Force in the Midst of Complexity," *Defense AT&L* (November-December 2006): 37.

13. Weick, "The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster," 638.

14. Ibid., 633-34.

15. Ibid., 628-29.

16. Ibid., 633-34.

17. Ibid., 636-38.

18. Ibid., 629.

19. Clay Blair, *The Forgotten War: America in Korea 1950-1953* (New York: Doubleday, 1987), 456.

20. T.R. Fehrenbach, *This Kind of War* (Washington, DC: Brassey's, 2000), 239-43.

21. Blair, *The Forgotten War*, 458-59.

22. Ibid.

23. Ibid., 462.

24. Ibid.

25. Ibid., 463-64.

26. Ibid., 506-7.

27. Roy E. Appleman, *East of Chosin: Entrapment and Breakout in Korea, 1950* (College Station: Texas A&M University Press, 1987), 195-277.

28. Fehrenbach, *This Kind of War*, 246-48.

29. Blair, *The Forgotten War*, 457-58.

30. Fehrenbach, *This Kind of War*, 246.

31. Donald Knox, *The Korean War: Pusan to Chosin, An Oral History* (New York: Harcourt, Brace, Jovanovich, 1985), 528.

32. Appleman, *East of Chosin*, 316.

33. Blair, *The Forgotten War*, 518.

RECONSTRUCTION: A Damaging Fantasy?

Amitai Etzioni

FRANK-WALTER STEINMEIER, the German foreign minister, took a break from his diplomatic duties during a recent visit to Washington, D.C., to attend a dinner with a small group of intellectuals and discuss what American society will be like circa 2050. The dinner conversation was a stimulating and affable give and take, until dessert was served and a discussion of Afghanistan began. One of the American dinner guests suggested that the conceit that the West could reconstruct Afghanistan was highly unrealistic—and so was the notion that the U.S. could do this in other countries from Iraq to East Timor to Haiti. Indeed, he argued, the resulting failures were damaging to the West's resolve and credibility. Steinmeier's aide responded passionately, arguing that reconstruction in Afghanistan was progressing very well indeed. He pointed to the 2,000 schools that have been built since the 2001 U.S.-led invasion, to the vast increase in the number of children educated (including 1.5 million girls), and to the 4,000 kilometers of brand new paved roads.

As the German aide's remarks indicate, while support for military intervention in Afghanistan is waning in Germany (and in Europe in general), support for reconstruction remains strong. According to a German Marshall Fund survey, 64 percent of Europeans support reconstruction efforts, but only 30 percent support their troops engaging in combat.

In effect, although rarely put in these terms, a division of labor is evolving inside of the NATO mission: the military side of the operation is increasingly falling to the United States, while other nations are focusing their contributions on reconstruction. This division of labor is driven, on the Europeans' part, by a commendable reluctance to kill and be killed, a sense of a moral duty to help a poor people whose nation has been occupied, and the belief that economic development is essential if Afghanistan and other such countries are to wean themselves from the influence of extremists and not serve as havens for terrorists. This view assumes that foreign powers can engage in large-scale social engineering overseas "just as the U.S. and its allies helped reconstruct Germany and Japan after World War II." However, these are deeply flawed notions. A different, humbler, and more realistic approach is called for.

Limits of Social Engineering

The neoconservatives are much discredited these days; they are widely held to be responsible for the doctrine that led to the reckless 2003 invasion of Iraq. Their doctrine centered around the concept that foreign powers can readily turn state-controlled economies into free markets, and tyrannies into democracies. These same neocons gained a wide following in the 1980s by insisting that

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PHOTOS: The Bamiyan Buddhas (destroyed by the Taliban) and the World Trade Center (destroyed by Al-Qaeda), juxtaposed above, are emblematic of the psychic gulf between world views, ancient and modern, religious and secular, East and West. Today, their ruins remind us of the irrationality of extremism and the difficulty of rehabilitating societies that embrace it.

large-scale social engineering usually failed. Then, they were pointing to American cities where, one might add, the projects were undertaken under much more favorable circumstances than in Afghanistan.

The neocons alleged that most of the liberal Great Society programs introduced in the United States in the 1960s failed; the government failed to eradicate poverty, to help minorities catch up, to improve public schools, and to stop drug abuse. The neocons said that it was wrong to assume that a combination of well-meaning civil servants and oodles of money can solve social problems. Even so, in 2003 the same neocons applied basically the same liberal approach to far away Afghanistan and Iraq.

Champions of reconstruction also ignore the bitter lessons of foreign aid in general. An extensive 2006 report on the scores of billions of dollars that the World Bank invested since the mid-1990s in economic development shows that despite the bank's best efforts, the "achievement of sustained increases in per capita income, essential for poverty reduction, continues to elude a considerable number of countries." Out of 25 aid-recipient countries covered by the report, more than half (14) had the same or worsening rates of per capita income from the mid-1990s to the early 2000s. Moreover, the nations that received most of the aid (especially in Africa) developed least, while the nations that received very little aid grew very fast (especially China, Singapore, South Korea, and Taiwan). Other nations found foreign aid a "poisoned gift" because it promoted dependency on foreigners, undermined indigenous endeavors, and disproportionately benefited those gifted at proposal writing and courting foundation and foreign aid representatives, rather than local entrepreneurs and businessmen.

Above all, the World Bank and other students of development have discovered—surprisingly recently—that large parts of the funds provided are wasted because of widespread and high-level corruption. In *The White Man's Burden*, William Easterly systematically debunks the idea that increased aid expenditures in and of themselves can alleviate poverty or modernize failed or failing states, and points to the key roles that bad government and corruption play in these debacles. Steve Knack of the World Bank showed that, "huge aid revenues may even spur further bureaucratization and worsen corruption." Others found that mismanagement, sheer incompetence, and weak government were almost as debilitating.

One should add that not all the waste and corruption is local. Large portions of the aid budgeted for Afghanistan and other such countries are handed over to non-governmental organizations subject to little accountability, or spent on extraordinary profits to Western contractors and corporations for high-fee Western consultants. (American law requires that 100 percent of food for American foreign aid be purchased from United States farmers, and that U.S. freight carriers ship 75 percent of it.)

A 2008 study by *The Economist* found that one of the main reasons that Afghanistan's development is proceeding so poorly is the widespread corruption, cronyism and tribalism, lack of accountability, and gross mismanagement. *The Economist* recommended that the West lean on the president, Hamid Karzai, to introduce reforms. One cannot but wonder: How should Mr. Karzai proceed? Should he call in all the ministers and ask them to cease to take bribes and stop allocating public funds to their favorites? Fire them and replace them—and with whom? And if

Gold Coin of King Kanishka: Afghanistan 2000 years ago was the cultural crossroads of Eastern and Western civilization, thanks largely to Alexander the Great who subdued the region over 300 years earlier. Tribes driven from the borders of northern China settled in Afghanistan and assimilated Greek culture as the Kushans. This golden coin from Kaniska's Kushan empire (127 C.E.) displays Greek letters in a Persian dialect, reminding us of the confluence of cultures and religions in Kushan capitals at Balkh, Kabul, Begram, and Peshawar. Afghanistan under the Kushans became a center of Shaivism, Zoroastrianism, and later of Buddhist expansion into east Asia. Kushan descendents carved the Bamiyan Buddhas in the 6th century, dressing them in Hellenic tunics. Their multi-cultural legacy became a fertile conduit for the spread of Islam in the 7th century. Until Afghanistan was ravaged by the Mongols in the 13th century, and later by Turks under Tamerlane and by the Moguls of India, the region was a beacon to civilization. Once it was the home of fabulous libraries and famous philosophers, tradesmen, and artists, but the region's deeply ingrained ethnic and cultural divisions have hampered its recovery for centuries. Reconstruction will prove a monumental task.

he did, what about their staffs? Many of the police, judges, jailors, customs officers, and civil servants in Afghanistan regularly accept bribes and grant strong preference to members of their family, clan, and tribal group. Most are poorly trained and have no professional traditions to fall back on. How is a president (even backed up by foreign powers) to change these deeply ingrained habits and culture?

One may argue that such reforms occurred in other countries, including in the West. Indeed, social scientists could do a great service to developing nations if they conducted a thorough study of how those nations succeeded in curbing corruption and gross mismanagement. The study would probably show that the process took decades, if not generations, and that it entailed a major change in social forces (such as the rise of a sizable middle class) and major changes in the education system—among other major societal changes. Such changes cannot be forced and must be largely endemic.

The same holds true for the reform of schools. Afghanistan now has many more schools and more students in them than a few years back, but educational reform requires much more than constructing buildings and filling classrooms. Also needed is a massive retraining of Afghan teachers, who themselves often have little modern education (especially in science and math) and little taste for modern teaching methods, preferring that children learn by rote from old texts. Retraining thousands of teachers (or preparing new ones) requires teachers' colleges or other such sizeable educational facilities that are currently unavailable. It also requires that the principals, school administrators, the various bureaucrats in charge of education—and even the parents—accept the new ways of teaching and the new content. None of this comes easily.

Traditional habits and values have been followed for centuries and are deeply ingrained in the other elements of the economy, polity, and society. Changing them is often a slow and difficult process that outsiders cannot impose—let alone rush along. Given that the United States has been unable to reform its own public schools from Washington D.C. to Los Angeles, why should we assume it can do so in Afghanistan? Given that the French are unable to cope with Muslim minorities in the outskirts of Paris, why would we expect them to do so in the outskirts of Kandahar? Nor have other

Given that the United States has been unable to reform its own public schools from Washington D.C. to Los Angeles, why should we assume it can do so in Afghanistan?

European nations shown great success in social reforms at home. Despite a trillion dollar investment by Germany in the "new lands" (formerly East Germany), the region is still lagging on many fronts, 18 years after unification.

Many conditions that are unlikely to be reproduced elsewhere led to successful reconstruction in Germany and Japan after World War II. First, both nations had surrendered after defeat in a war and fully submitted to occupation. Second, many facilitating factors were much more established than they are in countries in which social engineering is now being attempted. There was no danger that Japan or Germany would break up due to a civil war among ethnic groups, as is the case in Afghanistan and Iraq. No effort had to be expended on building national unity. On the contrary, strong national unity was a major reason change could be introduced with relative ease. Other favorable factors included competent government personnel and a low level of corruption. In *Liberal America and the Third World,* Robert Packenham cites, as core factors, the presence of "technical and financial expertise, relatively highly institutionalized political parties, skillful and visionary politicians, well-educated populations, [and] strong national identifications." And, crucially, there was a strong culture of self-restraint present in both Japan and Germany that favored hard work and high levels of saving, essential for building up local assets and keeping costs down.

Conditions in the donor countries were different as well. In 1948, the first year of the Marshall Plan, aid to the 16 European countries involved totaled 13 percent of the U.S. budget. In comparison, the United States currently spends less than one percent of its budget on foreign aid and not all of it is dedicated to economic development. Other nations are doing better, but the total funds dedicated to foreign aid are still much smaller than those committed to

reconstruction at the end of World War II. In short, the current tasks are much more onerous, and the resources available are meager in comparison.

Max Weber, a sociological giant, established the importance of culture (a polite term for values) when he demonstrated that Protestants were more imbued than Catholics with the values that lead to hard work and high levels of saving, essential for the rise of modern capitalist economies. For decades, developments in Catholic countries (such as those in Southern Europe and Latin America) lagged behind the Protestant Anglo-Saxon nations and those in northwest Europe. These differences declined only when Catholics became more like Protestants.

Culture is also a major factor that explains the striking difference between various rates of development, especially between the South Asian "tigers" (that received little aid) and African and Arab states that received a lot of it. The thesis is *not* that these latter states cannot be developed because of some genetically innate characteristics of the people living there, but because their cultures stress other values, especially traditional religious values and communal and tribal bonds. These cultures can change, but, as the record shows, only slowly, and the changes involved cannot be rushed by outsiders.

When all is said and done, one must expect that reconstruction in nations such as Afghanistan will be very slow and highly taxing on all involved.

Economic Development Does Not Stop Terrorism

One may say that the West has no choice but to help develop Afghanistan and other such nations because if the masses involved do not have jobs and a decent income or own some land and homes, Afghanistan and the other nations will be fertile ground in which to grow terrorists. This is said to be especially true in undeveloped countries in which there are large numbers of young people because of the high birth rate and declining death rates.

Despite a widely held notion among progressive people that terrorism is linked to poverty and that development is the best antidote, most data show that there is no correlation between the two. For instance, a widely cited study by Alan Krueger and Jitka Maleckova of the National Bureau of Economic Research concludes, "The evidence we have assembled and reviewed suggests there is little direct connection between poverty, education and participation in terrorism and politically motivated violence."

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The 9/11 terrorists who attacked the American homelands came from middle class backgrounds, and several studied at universities. Bin Laden is a billionaire. F. Gregory Gause pointed out that "the academic literature on the relationship between terrorism and other sociopolitical indicators, such as democracy, is surprisingly scant."

Mahmud of Ghazni wrought an extensive empire in the late 10th century from regions of modern-day Afghanistan. He extended his realm into Iran, northwest India, and the lands of modern Pakistan. Mahmud is celebrated in Afghanistan and Pakistan as an Islamic hero. In India he is remembered as a war criminal and a piratical raider bent upon enslaving the Hindu population and destroying its culture. He is especially reviled for destroying sacred statues and icons of Buddhism in northern India. The Taliban seemed to imitate Mahmud in destroying the Bamiyan Buddhas. The name Hindu Kush, named for Mahmud's "slaughter of the Hindus," recalls the hatreds and cultural enmity that divide the region's inhabitants. These deep ethnic animosities are difficult for the West to understand, and they underscore the significant challenges of a Western cultural reconstruction.

Moral Obligations: Not to Squander

Ethics often persuade individuals and nations who are privileged, whose incomes are well above those of other people or nations and who benefit from the past exploitation of former colonies, that they have a moral obligation to help the less fortunate. Some hold that this obligation is particularly strong for occupied nations because of the damage the occupiers do. When Colin Powell was the secretary of state, he reportedly quoted a Pottery Barn home furnishings store rule—"You break it, you own it"—and applied it to occupied states.

The fact is that Pottery Barn has no such rule. Nor is it obvious that when the West overthrows a tyrannical government of the kind imposed by the Taliban or Saddam, it owes anything else to the liberated people. Indeed, one may hold that they owe the West a resounding vote of gratitude. The extent that one agrees that the occupiers should make those occupied countries whole—for instance pay for doors that have been broken down in the search for terrorists—is limited by what the term "reconstruction" actually means. That is, restoring the conditions to the status that preceded the occupation—not constructing a whole new economy, polity, and society from A to Z.

Whatever conclusion one reaches on this last question, the occupier clearly has a moral obligation not to squander limited resources. Although this issue is hard to face, the truth is that however the West increases its foreign aid, it will never come close to providing the resources that are needed if it defines development—as the West is doing both in Afghanistan and Iraq—as remaking practically all aspects of the societies involved, including their economies; civil service, education, public health, and welfare systems; security forces; judicial agencies; media; and much else.

It is often argued that the United States had no plan for post-war Iraq. In fact, prior to the 2003 invasion, the State Department had prepared a massive 13-volume study, known as the "The Future of Iraq Project." The study provides plans for reconstruction projects for water, agriculture and environment, public health and humanitarian needs, defense policy and institutions, economy and infrastructure, education, justice, democratic principles and procedures, local government, civil society capacity building, free media, and oil and energy, among many others.

As a result of such a wide-ranging, scattergun approach, scores of projects were started, but very few have been completed. Indeed, many were abandoned because there were not enough funds to complete them. To reiterate, although progressive observers would respond with urgent demands to increase the aid given, however large the budget, there continues to be a great mismatch between the resources needed and those available, and many processes of change take a long time to mature (e.g., acculturation) and cannot be rushed. Once one fully faces this cardinal observation, one must conclude that asking where the limited funds will do the most good—and where they are likely to be wasted or even cause damage—is not merely a practical question, but a key moral one as well. All those who engage in medical triage face this issue, however reluctantly, and those who engage in social engineering must do so as well—that is, establish which projects are beyond repair and should be allowed to die, which are likely to make it on their own, and should not receive funds, and which select few should be given first priority.

What Might Be Done?

Development triage has not been tried and requires considerable deliberations. It cannot be rolled out here; however, it can be illustrated by providing some preliminary indications of suggested guidelines.

Make security the first thing. I have shown elsewhere (in *Security First: For a Muscular, Moral Foreign Policy*, Yale University Press, 2007) that basic security must be provided first. If oil pipelines laid during the day are blown up at night, oil will not

…asking where the limited funds will do the most good—and where they are likely to be wasted or even cause damage—is not merely a practical question, but a key moral one as well.

flow very far. If electricity stations are constructed at great costs but not secured, they are merely another place resources are wasted. If professionals fear terrorists, they will leave the country to work elsewhere, and so on.

The term "basic security" indicates that it is not necessary to overcome all threats; indeed, even in Western cities there is some element of danger from both criminals and terrorists. However, such threats must be kept at a level at which the population feels that it can function and that resources are being put to work and accumulated rather than depleted.

The reverse argument, that development is essential for security and hence must precede it, is erroneous because without basic security, development cannot take place, and because, as we have seen, development per se does not provide security.

Prioritize humanitarian aid. On moral grounds, humanitarian aid should be provided in the form of basic supplies (of the kind provided after natural disasters) whether or not these lead to development, are lost in part to corruption, add to security, or have any other utility.

Go for easy wins. Short-term payoffs must be preferred to long-term ones. Providing better seeds, fertilizers or irrigation pays off within months; planting trees—within years; and primary education—a decade or more. These examples illustrate how difficult it is to accept the conclusions that triage can lead to. However, acting otherwise undermines the goals at hand.

Hone project profiles. Projects that have a high-multiplier effect are to be preferred over those that have low-multiplier effect, those that are labor-intensive and not capital-intensive over those that have the opposite profile, and those that use little energy or renewal energy over those that have the opposite profile.

Limit projects. In each given area, strong preference should be given to the completion of a small number of projects over starting a large number. (This is the opposite of the way development has been approached in Afghanistan and Iraq).

Retain old elements. As a rule, old elements should be left in place and fixed or reformed gradually rather than replaced. This holds true for equipment and for institutions and their staffs. For instance, tribal chiefs (in Afghanistan) and members of the governing party in public service (the Ba'ath in Iraq) should have been allowed to continue their leadership roles, as the United States did at the end of WWII by leaving the emperor in place in Japan.

Frame efforts more humbly. A radically different framing of development is essential. It entails abandoning the oversell and hype, including promises to flip a nation from poverty to affluence, from tyranny to democracy, or from terror to peace. Instead, repeated warnings are best issued to indicate that the road ahead is a long and arduous one. A major lowering of expectations is essential to avoid loss of support from donor countries and aid recipients, to encourage those involved to make whatever contributions they are able to make rather than rely on handouts, and to motivate them to reduce conflict and work out their differences via political channels. A sound indication that the proper framing has been achieved will be when those involved voice surprise that results have exceeded expectations.

Sympathetically imagine effects and perceptions. We rarely discuss the reality that Western social engineers are, in effect, seeking to turn Afghanistan and other such nations into Western societies and that this deeply offends the religious and nationalistic values of most of the people in these societies. The main problem is not that we are undermining the old values and the social relationships built around them, but that we do not address the resulting values vacuum. Instead, in effect, we promote Western forms of hedonistic materialism or consumerism; we measure progress by the increase in income per capita or the number of washing machines or TV sets the population owns. These values do not address spiritual, social, and moral issues that devout Afghanis care about. What is necessary is for their traditional values to be replaced or (more practically, transformed) into different, but positive social moral values, of the kind favored by moderate Muslims. What these new social moral values might be and how they can be fostered is a major and complex topic that cannot be treated here in passing. However, the fact that we are not addressing this problem is a major reason Western ideas of economic development are not as welcome there as we, their advocates, expect them to be.

One may well provide different criteria to guide reconstruction triage. The record, however, leaves no doubt that an overly ambitious and scattergun

approach is very likely to fail, and there are serious doubts about its moral worth because it leads to the squandering of scarce resources and increased alienation. In reconstruction, as in many other areas of human pursuit, less is more. If the Europeans are to take the lead in the reconstruction of Afghanistan, and if that country is to serve as a model for the development of other such nations, this cause would be better served if those who lead show humility, embrace triage, and replace hype with achievements that exceed promises, rather than greatly lag behind them. ***MR***

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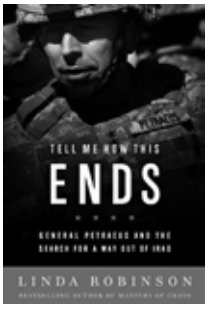


Featured Review

TELL ME HOW THIS ENDS: General David Petraeus and the Search for a Way Out of Iraq, Linda Robinson, Public Affairs, New York, 2008, 411 pages, $27.95.

As a rule, hyperbole is permissible for the "blurbs" on the jacket of books and not in reviews, but in the case of Linda Robinson's *Tell Me How This Ends*, it's a hard one to follow. Robinson's book is among the best written about the war in Iraq. Her aim is to provide "readers with a perspective of the conflict's entire dynamic," and to a large extent, she succeeds. General David Petraeus is the lead character, but Robinson makes it clear that Petraeus and Ambassador Ryan Crocker operated in tandem. Each brought superb skills and perseverance to bear on what even the trendiest pundits describe as a "wicked" problem.

The book looks at the Iraq war from the "top-down" and from the "bottom-up" by including the interplay of protagonists among Iraq's leadership, warring tribes, foreign fighters, coalition leaders, and units such as the much-traveled, well-worn Black Lions of the 1st Battalion, 28th Infantry.

Although Robinson's tone is neutral, she is not detached. Her account of the failed transition is more compelling because it is more dispassionate than the angry harangues of many earlier books, including, for example, Tom Ricks' *Fiasco*. Nor is she breathlessly reporting as though she personally overheard policy being made in the way that Bob Woodward does. In two crisply written chapters, Robinson argues that there was plenty of blame to go around, and not all of it goes to the "suits." She says Condoleezza Rice, Donald Rumsfeld, and Paul Bremer deserve most of the discredit but that Generals Tommy Franks, John Abizaid, George Casey, David McKiernan, Richard Meyers, and Peter Pace all deserve some of the blame, as does Ricardo Sanchez, despite his protests.

The bulk of the book examines the "surge" from General Petraeus and his close advisors' perspectives but within the context of decisions made by the president and Secretary of Defense Gates, and within the partnership forged with Ambassador Crocker. If the surge turned out badly, Petraeus would have borne the brunt of the disapprobation. It is also equally clear that, contrary to the myth, Petraeus is not the sole author of the surge or the inventor of counterinsurgency. Robinson shows clearly that the surge represented not just more troops but a sea change in how policy makers saw the role of the U.S. in Iraq. Prior to 2007, the administration and its generals saw the role of the U.S. as limited to finding the means to hand over the problem to the Iraqis. In that context, as General Abizaid put it, U.S. troops were part of the problem, so reducing their presence seemed essential. The surge is also how troops are used. Coupled with persistent efforts led by Ambassador Crocker to engage the Iraqi government, the U.S. effort since 2007 has assumed the "long war" approach and a more active involvement at lower tactical echelons by U.S. troops—to both provide an economic stimulus and carry the fight to the neighborhoods.

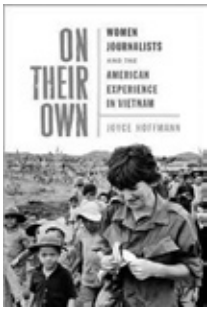
At the tactical level, troops led by first-rate officers such as Colonel Ricky Gibbs, commander of the 4th Brigade Combat Team, 1st Infantry Division, and Lieutenant Colonel Pat Frank, commander of the 4th Brigade's 1st Battalion, 28th Infantry, engaged local leaders at regional and local levels to learn what buttons to push within both the formal and informal power systems. Their troops waged and won hard tactical engagements, employing what a battalion commander in Bosnia termed "grunt" diplomacy. Other Soldiers, including Pete Mansoor and H.R. McMaster, debated the elements of the surge strategy and provided a foil for Petraeus as he considered what he had to do. Just as important, Lieutenant General Ray Odierno, who led the multi-national corps, adapted rapidly to the conditions on the ground and proved an able, if junior, partner to Petraeus and Crocker. Robinson concludes that Petraeus and Crocker brought three traits to Odierno's task that served them, the country, and Iraq well: intellectual rigor, the ability to lead, and persistence coupled with tenacity. Together, according to Robinson, Petraeus, and Crocker left Iraq better than they found it.

Robinson concludes that the story of General Petraeus is far from over. Victory in the sense of an unqualified success in Iraq seems unlikely. She argues that Petraeus either will have avoided failure as Ridgway did in Korea or will be compared to General Abrams, "whose efforts and innovations did not ultimately save the United States from defeat in Vietnam." What she did not say is that, despite the results, Ridgway and Abrams were heroes and so, too, is Petraeus.

Colonel Gregory Fontenot, USA, Retired,
Lansing, Kansas

ON THEIR OWN: Women Journalists and the American Experience in Vietnam, Joyce Hoffmann, Da Capo Press, Cambridge, MS, 2008, 439 pages, $27.50.

BREATHING THE FIRE: Fighting to Report—and Survive—the War in Iraq, Kimberly Dozier, Meredith Books, Des Moines, IA, 2008, 288 pages, $24.95.



Featured Review

War correspondents are a unique breed, attracted—even addicted—to adventure and danger. Trained to dispassionately observe and analyze, they maintain objectivity about and emotional distance from the often-horrific events unfolding before them. Each is, in not necessarily equal measures, part voyeur, First Amendment crusader, and ambitious pragmatist out to scoop the competition, score lead stories, and attract the attention of media bosses focused on the financial bottom-line.

Two recently published books examine in very different ways battlefield reporters' raisons de être. For journalist and university professor Joyce Hoffmann, gender is a central defining characteristic to be exhaustively examined; for CBS Correspondent Kimberly Dozier, her sex is largely incidental, a non-issue footnote in an intensely personal story about surviving the IED blast that killed her crew and a Soldier escorting her.

Hoffmann spent more than a decade researching her vignette-laden study of female journalists, covering the Vietnam conflict from the 1950s to the war's end in the mid-1970s. Writing in the third person, often from transcripts and library files and only occasionally from first-hand interviews with a few of her subjects, Hoffmann delves into the lives, careers, and yes, loves of dozens of women who dared enter male domains, both military and journalistic. At times, Hoffmann's disciplined, scholarly documentation mixes uneasily with a breathless *Vanity Fair*-esque flash-back-flash-forward narrative style. However, it is fascinating to catch behind-the-scenes glimpses of how their roles as reporters and women evolved along with the conflict.

Hoffmann reveals that in pre-war, military-advisor, CIA-operative days, journalistic novices like Gloria Emerson often followed their boyfriends to Southeast Asia seeking romance, fame, and fortune. A 20-something glamour girl with scant credentials as a society page writer for New York's *Journal-American*, Emerson arrived in Vietnam in 1956 wide-eyed and optimistic, convinced the U.S., with the help of her CIA paramour, would save the people of South Vietnam from the communist scourge to the North. At first, she filed chatty Saigon-lifestyle stories for *Mademoiselle* and other publications. In 1970, she returned as an older, wiser correspondent for the *New York Times*, chronicling the destruction of the beautiful country she had so loved in her youth.

In sharp contrast to Emerson, reporter/photographer Dickey Chapelle was already a seasoned veteran of more than a half dozen wars and assorted revolutions when she landed in Indochina in 1961. Hard as nails and stubbornly independent, she thrived on covering the growing conflict from the foxholes and rice paddies side-by-side with the Soldiers and Marines she admired.

Hoffmann writes, "Devoted though she was to America and its military men, government meddling in her work as a journalist taxed even Chapelle's loyalty to the nation's leaders. Without the press, Chapelle insisted, the military would become the sole guarantors of the integrity of history, even though they were 'the least objective observers around.' Substituting government press releases for eyewitness observation, she added, 'has all the authenticity of a patent medicine ad.'"

The friction between the military and media that Chapelle experienced eventually soured the relationship and that result continues to the present day.

Marching with "my Marines" on a search-and-clear mission in 1965, Dickey Chapelle was struck by shrapnel when a young Marine on the jungle path ahead of her hit a booby-trap trip wire. According to Hoffmann, Chapelle, a sprig of pink flowers tucked into her trademark Australian bush hat, was the first American woman killed in action in Vietnam.

Forty-one years later, Kimberly Dozier narrowly escaped a similar fate in the war in Southwest Asia. In her harrowing memoir, *Breathing the Fire*, Dozier recounts the events leading up to the day a vehicle-borne IED exploded on a Baghdad street, and her torturous, ongoing physical and emotional recovery from injuries so extensive that doctors once feared she might lose her legs.

Writing in a crisp, clear, broadcast-news style, Dozier's account of the Memorial Day, 2006, incident is both personal and visceral, describing her excruciating brain and burn injuries as well as the pain surrounding the deaths of her two CBS coworkers, a U.S. Army Civil Affairs captain, and his Iraqi translator. Treated in a succession of military facilities including Bethesda Naval Hospital, Dozier reports that her family and employers decided military medical care offered her the best hope for survival.

"The surgeons advising us at Landstuhl felt military surgeons had the most experience with blast injuries and Bethesda had the most experience with blast-caused TBI (traumatic brain injury)," she explained in an interview. "CBS News' war insurance paid for all my treatment, throughout the stays."

In the last third of her book, Dozier paints a vivid picture of what it is actually like to be a war correspondent. Her description of running military checkpoints and dodging Iraqi troops in the initial race to Baghdad crackles with energy and virtually leaps from the page.

Now back on the air, Dozier won a George Foster Peabody Award in April 2008 for a CBS video report about two female American veterans who lost limbs in Iraq. A few weeks later, the Congressional Medal of Honor Society presented her with the Reagan "Tex" McCrary Award for Journalism, the first woman to receive the award.

"Receiving the McCrary award was stunning," Dozier told me in an email. "For the actual award ceremony, I walked up to the podium

to speak, and the 37 or so Medal of Honor winners in attendance at the Atlanta event stood up for me, and the whole crowd followed. I found it hard to speak at that point—those guys are the real deal. It was an amazing honor that they would be applauding me."

Carol A. Saynisch, M.A., APR, former CBS News journalist, Seattle, Washington

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WE ARE SOLDIERS STILL: A Journey Back to the Battlefields of Vietnam, LTG(R) Harold G. Moore and Joseph L. Galloway, HarperCollins, NY, 2008, 272 pages, $24.95.

In 1992, Harold Moore and Joseph Galloway published *We Were Soldiers Once . . . and Young*, a book about the November 1965 battle between American and North Vietnamese soldiers in the Ia Drang valley, the first major clash of the two armies. The U.S. Army Command and General Staff Colleges' Department of Command and Leadership still uses the book to illustrate how the ability of direct and organizational-level leaders to employ the elements of battle command can result in success or failure of a unit on the battlefield.

We Are Soldiers Still records the journey of Moore, Galloway, and other veterans back to the Ia Drang Valley in 1993 to visit the battlefields at Landing Zones X-ray and Albany and to meet with their former enemies. The journey provided the old warriors, American and Vietnamese, an opportunity to exorcise the demons that have weighed heavily on their minds for close to 30 years. This book, however, is not a battlefield analysis. Although it presents the fighting in all of its brutal and gory details, the book is about people. It celebrates Soldiers, American and Vietnamese, and laments wars. Responding to Ronald Reagan's comment that the Vietnam War was a "noble" effort, Moore says:

"There has never been a noble war, except in the history books and propaganda movies. It is a bloody, dirty, cruel, costly mistake in almost every case, as it was in this war that would end so badly for us. However, the young soldiers can be and often are noble, selfless, and honorable. They do not fight for a flag or a president or mom and apple pie. When it comes down to it, they fight and die for each other, and that is reason enough for them, and for me."

The organizing narrative in the book is the trip back to the battlefields, but the narrative is interrupted by short, excellently conceived histories of the various American and Vietnamese Soldiers, when each appears in the narrative. General Moore's story should be particularly interesting to young American officers because it demonstrates that even one who had academic difficulties at West Point could have a successful military career through fierce determination and good judgment. Moore's story ends at his present age of 86 with his tribute to his wife, also a good "Soldier," who, among other "duties," ministered to the families of Moore's Soldiers who died in Vietnam.

The authors dedicate the book to their wives but address it to a new generation of American Soldiers consigned "to 'preemptive' wars of choice" and condemned "to carry their own memories of death and dying throughout their lives." These Soldiers will probably never have the opportunity, as did Moore and Galloway, to meet with, come to know, and even be friends with the adversaries they, with all their skills and determination, had tried to kill. Moore and Galloway tell a worthwhile and moving story.

LTC Matthew W. Broaddus, USA, Retired, Fort Leavenworth, Kansas

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THE MOST DANGEROUS ANIMAL, David Livingstone Smith, St. Martin's Press, New York, 2007, 263 pages, $24.95.

In *The Most Dangerous Animal*, David Livingston Smith takes an original approach to examining the causes of war and proposes its origin is rooted in human nature. Smith's unique look at war and human nature through the lenses of psychology, anthropology, evolutionary biology, sociology, and philosophy provides an interdisciplinary approach to understanding man's inherent desire and capacity to wage war. While his work strives "to understand the irrational *allure* of mass violence," it is not essentially an antiwar book. Smith peels away the misleading language shrouding war and shows it is a not senseless pursuit but a purposeful venture, and that war is not a societal anomaly but a distinctively human endeavor. He examines the intriguing dichotomy of social praise for violating society's deepest taboos, of the Soldier's self-perception of both hero and murderer, and of the individual's desire to kill the enemy and its accompanying psychological duress.

The homicidal nature of man has been well documented throughout recorded history. Smith explores the creative language accompanying warfare, which is used to "insulate our minds from its hellish reality." In recent wars, bombs are referred to as ordnance, mistakenly killing your own Soldiers is fratricide, and dead civilians are collateral damage. He shows that in the minds of many, the enemy has no brave patriots or heroes and its forces are comprised of only ruthless, cold-blooded murderers committing inhumane acts of violence. Smith claims this dehumanization of the enemy attempts to justify our actions and to remove the moral stigma associated with killing another human being. Smith argues this self-deception is necessary for the general population to maintain its support for the war effort and is a mental buffer for those who actually kill the enemy. The use of this placid language serves to hide "the true human costs concealed behind fantasies of valor and righteousness."

Smith asserts that evolution has rewarded the victors in war through natural and sexual selection, thus passing their genetic material on to future generations. Thus, long ago pacifistic societies were likely removed from the gene pool. He also points to man's intelligence and cooperative capabilities as setting

us apart from other species on the planet. These traits are used for both creation and destruction. Human beings have created both wonderful machines to help alleviate untold suffering along with the hydrogen bomb and its capability of causing untold suffering. He adds that human beings' cooperative nature begins to develop during youth. While virtually all young mammals engage in various forms of play pitting one individual against another, only human beings play games that pit one team against another. Smith claims this play "is a rehearsal for life." Thus, the one-on-one battles among most mammals serve to prepare the animal for its future territorial clashes, while team sports are preparing human youth for future wars.

Smith's look into human nature and man's propensity for war is insightful and thought provoking. The book's multifaceted approach to explaining war certainly presents the reader with a good foundation for further study and debate. The author goes to great lengths to explain complex scientific and philosophical concepts in a concise and understandable manner, allowing readers from diverse backgrounds to understand his logic and evidence in presenting his case on human nature.

LTC Randy G. Masten, USA,
Fort Leavenworth, Kansas

DAY OF EMPIRE, Amy Chu, Doubleday, New York, 2007, 396 pages, $27.95.

Amy Chu's, *Day of Empire*, is an intriguing look at the rise and fall of "hyperpowers." According to Chu, hyperpowers are "remarkable societies, barely more than a handful in history, that amassed such extraordinary military and economic might that they essentially dominated the world." She states that a hyperpower possesses supremacy that surpasses all other rivals, is clearly not inferior economically or militarily to any other power, and projects its power to an immense part of the globe. As Chu writes, "To be dominant, a society must be at the forefront of the world's technological, military, and economic development."

Tolerance is the most important characteristic that the great hyperpowers share. From Alexander's conquest to the rise of the United States, Chu uses historical examples to support her premise. For example, Chu cites Genghis Khan's assimilation of Chinese engineers into the Mongol Army. She also notes Genghis responded to Muslim envoy complaints about Christian persecution in the city of Balasagun, modern-day Kyrgyzstan. Genghis attacked and killed the Christian leader and incorporated Balasagun into his empire. Likewise, Chu describes how the Ottoman Empire's tolerance of non-Muslims led to an "immense economic expansion" of the empire.

Conversely, Chu also points out that the lack of tolerance often led to the collapse of hyperpowers. In 1905, British viceroy Lord Curzon's policies led to marginalizing Hindus in India's Civil Service, a move that backfired. Although India remained under British rule for another 43 years, the seeds of dissension were sown, and eventually Britain's racial intolerance led to large-scale demonstrations against the crown. Chu also cites intolerance in the Japanese empire during World War II. Before Japan's invasion of Singapore in 1942, Singapore was a major international trade center. Chu writes, "As soon as they invaded, monopolies were awarded to large Japanese corporations. Hyperinflation, price gouging, and corruption soon led to economic collapse."

Chu concludes her book with a chapter titled, "The Day of Empire," pointing out that at the end of the Cold War widespread anti-Americanism replaced the worldwide democratic movement. Chu contends that championing of American enterprise does not "Americanize" other nations. Chu writes, "Wearing a Yankee's cap and drinking Coca-Cola does not turn a Palestinian into an American."

Chu's book is a fascinating look at hyperpowers. She has carefully researched her subject and her scholarship makes *Day of Empire* well worth the read. Whether you agree or disagree with the basic thesis of her work—that tolerance is the most important characteristic successful hyperpowers share—Chu's book is an interesting look at the history of those states.

Mike Weaver,
Assistant Professor,
Ft. Leavenworth, Kansas

TAIWAN'S STATESMAN: Lee Teng-hui and Democracy in Asia, Richard C. Kagan, Naval Institue Press, Annapolis, MD, 2007, 231 pages, $30.00.

A good biography sketches its subject's life in a way that illuminates mysteries hidden beneath the surface. Richard Kagan's *Taiwan's Statesman: Lee Teng-hui and Democracy in Asia* examines the mercurial Lee Teng-hui, who as president of Taiwan successfully transitioned the country from authoritarian to democratic governance. Kagan introduces his book as more than political analysis, labeling it a character study.

Unfortunately, Kagan's lofty ambitions fall short. His inquiry into Lee's character produces trite ostentation and forceful pro-Lee bias, beginning with the title. Kagan intends the title, *Taiwan's Statesman,* to convey Lee's "ability to create a new identity for Taiwan." He persists with bombastic statements that the reader must blindly accept as fact, such as "Lee is a statesman because he reconceptualized Taiwan" and "through his efforts he was able to invent himself. And later, he used this self-made identity to invent a new Taiwan." Such gratuitous praise idolizes Lee's legacy but ignores many persistent fractures within Taiwanese society—especially over issues such as independence or reunification with China. The "new identity" that Kagan says Lee created is much less cohesive than Kagan admits.

Despite these flaws, *Taiwan's Statesman* succeeds where the author limits his writing to Lee's political career (exactly what Kagan

intended *not* to do). Here, Kagan provides cogent analysis, such as his explanation of why President Chiang Ching-kuo brought Lee into his inner circle. As "a loner without a large or significant constituency," Lee could not "join a faction, engineer his own political power base, or pose a threat to Ching-kuo's authority or office." The book's best chapters appear toward the end, as Kagan analyzes Lee's presidential years. However, Kagan never manages to shed his pro-Lee bias. For military leaders who seek an understanding of the China-Taiwan debate and other strategic issues in Asia, Richard Kagan's *Taiwan's Statesman* provides a solid assessment of Lee Teng-hui's career and accomplishments, but Kagan's vigorous bias weakens his insights into Lee's character. If Lee's character is truly as remarkable as Kagan proclaims, Kagan should have kept to the facts and let Lee's life speak for itself.

1LT Brian Drohan, USA,
Fort Hauchuca, Arizona

VIETNAM'S FORGOTTEN ARMY: Heroism and Betrayal in the ARVN, Andrew Wiest, New York University Press, New York, 2007, 338 pages, $35.00.

While tactical history can seem stilted and dry at times, Andrew Wiest, in *Vietnam's Forgotten Army,* presents an enriched and dynamic history of the Army of the Republic of Vietnam (ARVN) by chronicling the careers of two of ARVN's best young officers, Tran Ngoc Hue and Pham Van Dinh, as they fought in the Vietnam War. Wiest seeks to dispel the myth of the ARVN as an ineffective fighting force.

He argues that the ARVN suffered from many political and organizational obstacles, yet produced dedicated, professional, and competent officers who fought heroically for South Vietnam. Wiest uses the examples of Hue's and Dinh's military experiences fighting at Hue City, Dong Ap Bia, and Lam Son 719 to challenge the historical record of ARVN's poor performance. In each case, Wiest argues that the courageous and professional leadership of Hue and Dinh provides a glimmer of insight into the capabilities of ARVN. Even so, Wiest also calls attention to the severe corruption and political nepotism in the upper echelons of ARVN's command structure as a major cause of the ARVN's incompetence, argues that the ARVN had become deeply dependent upon U.S. forces, especially U.S. air power and artillery, and says that the United States sought to recast ARVN in the image of its own military. Both Hue and Dinh recognized these elements as substantial obstacles to the success of ARVN and yet could not overcome them even with their dauntless efforts.

The end of the story is tragic. Both Hue and Dinh faced a bitter defeat despite their gallant efforts. Dinh defected to the North Vietnamese Army, became a mid-level apparatchik, and then retired in 1989 to become a businessman. Hue, after 13 years in reeducation camps, lived in poverty until moving to the United States in 1991. The value of *Vietnam's Forgotten Army* lies in the author's appreciation for ARVN fighting prowess and the book's interesting perspective of the Vietnam War.

Sean N. Kalic, Ph.D.
Fort Leavenworth, Kansas

THE NORTH KOREAN ECONOMY: Between Crisis & Catastrophe, Nicholas Eberstadt, Transaction Publishers, New Brunswick, NJ, 2007, 329 pages, $39.95.

The post-Cold War North Korean economy has been a continuous disaster interrupted by catastrophe. Through exhaustive economic forensics, Korean political and economic scholar, Nicholas Eberstadt, illuminates the full extent of North Korea's economic situation and discusses its prospects for its future. Even though he faced North Korean government secrecy, poorly kept economic measures, quantitative data inconsistencies, self-deception of the country's economic policymakers, and falsification of information, Eberstadt cleverly utilizes "mirror statistics"—data on foreign trade trends reconstructed through trading partners' reports on international sales and purchases—to assess aspects of North Korea's economic performance that could not otherwise be analyzed. He meticulously fills information and data voids with viable, sophisticated economic deductions.

The book traces the origins of North Korea's economic troubles to its contentious, yet continuous, "military first" policy implemented in the 1970s—a policy that views military activities as securing regime survival and generating resources, not consuming them. The collapse of the Soviet Union and the subsequent loss of Soviet bloc-subsidized trade that North Korea so heavily depended upon exacerbated this misguided preservationist policy.

Eberstadt painstakingly details the macroeconomic factors believed to contribute to North Korea's current economic situation: no statistical system, the lack of a central planning apparatus, hyper-militarization of the national economy, a compressing consumer sector, demonetization of the national economy, the lack of financial intermediation, defiant nonpayment of international debts, and an apprehension of trade with "imperialist countries." North Korea's entire capital stock is worthless in the global marketplace, and its economic system is sustained only through external support and assistance. Even the agreement between North and South Korea to promote balanced development through economic cooperation essentially amounts to unconditional grants and subsidies from Seoul to Pyongyang.

North Korea's post-Cold War survival strategy is military extortion of trade subsidies, debt relief, and foreign aid—the export of international strategic insecurity in return for stability appeasement to the international community. Eberstadt believes the only viable way ahead for North Korea is to discard a security policy focused on regime security and international intimidation for a

policy featuring economic growth and development along the lines of the Chinese or the South Korean models, something not likely to happen anytime soon.

This is a very insightful book, full of smartly crafted and interpreted North Korean economic data. It is also a significant contribution to knowledge of international politics and economics—and has been written for a scholarly academic audience. Prospective readers of this book should keep this in mind before choosing to read it.

LTC David A. Anderson, Ph.D., USMC, Retired,
Fort Leavenworth, Kansas

1948: A History of the First Arab-Israeli War, Benny Morris, Yale University Press, New Haven and London, 2008, 524 pages, $32.50.

Conventional wisdom holds that the Arab-Israeli conflict is at the heart of the broader problems of the Middle East, yet the facts concerning this conflict remain in dispute. Many Americans, raised on the idealized image of Israeli settlers as persecuted and outnumbered heroes in a prolonged struggle against hordes of malevolent Arabs, find it difficult to understand the very different images commonly held in the Arab world.

Benny Morris, like Avi Shlaim and other recent Israeli historians, seeks to provide a more balanced reassessment of this shared Israeli-Palestinian past. His most recent effort is a detailed reconstruction of the 1948 conflict that secured the newly independent state of Israel against the simultaneous invasion of five Arab armies. In the process of recounting this war, Morris meticulously analyzes a number of contentious issues between the two sides.

First, he considers the widely held Arab belief that the Western powers imposed a divided Palestine on its population. In fact, Morris argues, those Western powers not only did not enforce the UN partition plan, but repeatedly hampered Israel's military actions, thereby saving the Arab states from defeat. He also contends that, although its foes outnumbered Israel, the Jewish state actually possessed more trained manpower and eventually more weapons than the opposing Arab armies did. While recognizing the valor of individual Arab soldiers, he notes that few Arabs actually fought in 1948, while their leaders were more interested in seizing territory than destroying Israel.

After carefully analyzing alleged atrocities on both sides, the author arrives at a disconcerting and unpopular conclusion. He asserts that, with some exceptions, the regular Arab armies obeyed the law of war, while Israeli forces murdered as many as 800 civilians and prisoners and raped a number of Arab women.

Perhaps the most contentious issue, then and now, is the problem of the Palestinian refugees who, for 60 years now, have been unable to return to their homes. Morris acknowledges that Israel encouraged this emigration, but offers a number of important caveats. First, he argues that prior to 1948, few Jews advocated such a refugee flow, whereas Arab leaders consistently demanded the expulsion of most Jews, a demand they carried out both by pressuring their own Jewish populations to move to Israel and by evacuating any Jewish settlement. Second, the author contends the initial expulsion of Palestinian residents happened only because their villages provided support for extremists who interdicted Israeli supply lines in the conflict. Even after these expulsions became routine, Israel did not enforce the policy consistently, resulting in some Palestinian groups remaining within the new Jewish state.

Overall, *1948* is a superb attempt to provide a reasoned assessment of a very contentious period. It is well worth study by anyone seeking to understand the Middle East that this war helped create.

COL Jonathan M. House,
USA, Retired,
Fort Leavenworth, Kansas

TANK MEN: The Human Story of Tanks in War, Robert Kershaw, Hodder and Stoughton, London, 2008, 462 pages, $39.70.

Robert Kershaw, a British historian and veteran infantrymen of the 1991 Gulf War, has amalgamated the wartime experiences of German, Russian, American, British, and Italian tank crewmembers into one book. Although it includes some World War I tank history and experiences, most of the book consists of stories from newly researched personal testimonies from World War II veterans. The intent is to capture the human story from ordinary tank crewmembers, specifically focusing on the theme of the human implications of tank-on-tank technical inequalities in combat.

Kershaw begins with the genesis of the tank in the First World War, including the history of the tank's initial design, and recollections from British and German soldiers seeing the metal monolith for the first time. Unique to this book is a vivid description of what it was like to be a tank crewmember in World War I, wearing the uniform and protective chain-mail mask, special helmet, and leather jerkin. He describes the life of the confined tank crewmember inside the early tanks, from the repressive heat and fumes to the techniques they developed to communicate between themselves over the din of battle, the roaring engine, and loud noise of tank tracks.

Kershaw discusses the tank's continued technical development between the wars in the areas of mobility, protection, and firepower, and reports how various nations envisioned fighting with these new tanks in future wars. As World War II begins, the book turns toward "day in the life" experiences from veterans of the 1940 German blitzkrieg in France to the African desert and Russian plains in 1941–1943 and Western Europe in 1944–1945. The first-hand accounts of combat from inside the tank are captivating and alone make the book worth reading. However, Kershaw has gone beyond creating an exclusively historical study of the human dimension in tank warfare to address issues that are still quite relevant. For example,

he describes the challenges nations face when they field new systems in a hurried fashion to give their soldiers an edge over the enemy in mobility or protection. He examines morality in war, the psychological and physical trauma war causes, and the inadequate medical treatment of those who have been through the horrors of war. This is not an analysis of armored warfare in a tactical or operational sense, but instead it is a human history of men who fought inside steel machines and the issues they have had from 1916 to today.

LTC Scott A. Porter,
USA, Retired,
Fort Leavenworth, Kansas

FROM STALINGRAD TO PILLAU: A Red Army Artillery Officer Remembers the Great Patriotic War, Isaak Kobylyanskiy, University Press of Kansas, Lawrence, KS, 2008, 328 pages, $29.95.

Over the past 20 years, there has been resurgence in the literature covering the Eastern Front in World War II. With the openness of post-Soviet Russia, numerous personal accounts have been published which supplement the typical battlefield narrative. *From Stalingrad to Pillau: A Red Army Artillery Officer Remembers the Great Patriotic War* provides the reader with a "gun sight" view.

In the last 20 years, there has also been a small outpouring of personal accounts from Russian soldiers who served during the war. Prior to the collapse of the Soviet Union, most personal accounts were couched in party dogma, but this work avoids this problem while still exploring the full gamut of a tactical officer's battlefield experiences.

It is not uncommon to find the commanding generals penning lengthy wartime memoirs justifying or vindicating their roles within a particular operation. All too often, the tactical echelon, where the bullet literally meets the bone, is ignored in pursuit of the big picture. *From Stalingrad to Pillau* is wholly based at the tactical level, offering the reader insight into one of the most underrepresented combat roles, direct support artilleryman, in the war.

Isaak Kobylyanskiy served as an officer in an artillery battery designated as direct infantry support. His battery was armed with the famous 76-millimeter (mm) artillery piece. This weapon served as the backbone for the anti-tank defense of the infantry divisions. Relatively mobile, rugged, and able to penetrate most German tanks, the 76-mm gun (in several manifestations) was the bane of German maneuver elements, and Kobylyanskiy provides a vivid account of the use of this weapon system.

Kobylyanskiy presents a well-rounded work covering many of the traditional aspects one would expect to find. His detailed descriptions of his battlefield encounters, both successful and unsuccessful, provide a candid recollection including the arduous, ever present foot marches as well as the horrors of being in the midst of a battlefield rout with a heavy piece of machinery to move and no horses. Kobylyanskiy verbally recreates many of the soldiers that he served with, making this a very personal account.

Stalingrad to Pillau also covers many less common topics. His book discusses politics in the military, training, life behind the front lines, and women in the Soviet military mostly in separate chapters. Kobylyanskiy's discussion of women in the Red Army is quite extensive. His exposure, at the regimental level, to women serving on the front lines should be interesting to Western readers for whom the experience is foreign. His brief discussions on mobilization, training, replacements, and demobilization also illuminate some of the other aspects of the Red Army with which western audiences might not be familiar.

A reader who seeks a ground's eye view of the war on the Eastern front will be well served by reading this book. The author's candid coverage of both the moral and military issues provides a critical missing piece to the literature of the war on the Eastern front.

SSG Jeremy Byers,
Topeka, Kansas

THE SECOND BATTLE OF THE MARNE, Michael S. Neiberg, Indiana University Press, Bloomington, 2008, 232 pages, $27.95.

Michael Neiberg's *The Second Battle of the Marne* fills a void in the written history of World War I. He makes a great contribution to understanding that war by casting the Second Battle of the Marne in its proper and decisive place in history.

Neiberg begins at the beginning of the German offensive in the Marne with the disastrous compromise of their plan. In the hours preceding the offensive, a German officer conducting a reconnaissance on the Allied side of the Marne River was captured, and in his possession were the plans for that campaign. This compromise allowed the Allies to make last minute preparations and defeat the German attacks.

Not surprisingly, the Germans failed to achieve their objectives. The loss of surprise, Allied preparedness, a greatly rejuvenated French Army, and the introduction of the American Expeditionary Force (AEF) combined to present too great an obstacle. Neiberg describes the key events in the battle, including the defense along a section of the Marne River by the U.S. 38th Infantry Regiment, 3d Infantry Division, the "Rock of the Marne." His other descriptions encompass both Allied and German perspectives.

With this battle's conclusion, the entire character of the war changed. Due to tremendous losses in manpower, terrain, and resources, the German Army lost the ability to ever achieve its strategic objectives. The Allies were then able to seize the initiative and transition to operations more offensive in nature.

Neiberg's book poses new insights. He adds three new elements to the body of knowledge of the Great War: analysis of operational design; a more accurate understanding of the true character of the French Army and, more important, its leadership under General Foche; and a description of the AEF and its actions during the battle.

In his analysis of Allied and German plans, Neiberg does a good job linking strategic, operational, and tactical concepts and illuminates the lack of linkage between these concepts in German plans. His analysis helps explain why many engagements during this period had no apparent supporting relationship to one another.

Another contribution Neiberg makes is his assessment of the French Army and its leadership during the period. Rather than dwell upon the mutiny and dissention with which many are familiar, he portrays a new French Army with discipline and professionalism. His analysis of General Foche is excellent.

Finally, the author gives an assessment of the AEF. He covers its levels of training and leadership and does an admirable job describing its integration into the operational and tactical levels of war. He describes numerous actions, and shows that despite an initial lack of preparedness, the AEF quickly developed into a superb fighting force.

Neiberg's re-casting of this epic battle and its importance in the war presents a valuable new perspective. His analysis, particularly of operational design and the French Army and its leadership, will give many readers a new understanding of this pivotal period during World War I.

LTC Thomas G. Meara,
USA, Retired,
Fort Leavenworth, Kansas

MR Letters

Amnesty, Reintegration, and Reconciliation in Rwanda

LTC Thomas P. Odom, *USA, Retired,* author of *Journey into Darkness: Genocide in Rwanda*—I certainly support study of the Rwandan civil war and genocide as a case of post-conflict resolution, reintegration, and reconciliation. As the U.S. Defense Attaché in Zaire from 1993-1994, and then Rwanda 1994 to 1996, I lived through the initial stages of that process. But the recent article in *Military Review*, "Amnesty, Reintegration, and Reconciliation in Rawanda" (AR2) by Major Jeffrey H. Powell (September-October 2008), suffers from errors of fact, superficial research, and poor analysis.

Errors of fact

"The calculated policies of Belgium, Germany, and France divided Rwanda against itself for easier colonial rule. These policies of 19th century rule had a lasting effect…"

- Germany and Belgium were the colonial powers in Rwanda, not France.
- Belgium did not become a colonial power in Rwanda until the 20th century.

"After independence in 1959…" Rwanda achieved independence in 1962.

"In August 1993, when regional and international actors arranged detailed peace negotiations to be enforced by the United Nations Assistance Mission for Rwanda (UNAMIR), a brokered reconciliation effort began."

- The Arusha Accords were signed in August 1993; the negotiations began in July 1992.
- "UNAMIR's mandate was: to assist in ensuring the security of the capital city of Kigali; monitor the ceasefire agreement, including establishment of an expanded demilitarized zone and demobilization procedures; monitor the security situation during the final period of the transitional Government's mandate leading up to elections; assist with mine-clearance; and assist in the coordination of humanitarian assistance activities in conjunction with relief operations."* UNAMIR did not have an enforcement mandate and was not equipped or manned for such a mission.

"…Rwanda's President Habyarimana flew to Dar-es-Salaam, Burundi, to meet with other signatories of the accords. On his return flight, Hutu extremists in the Presidential Guard shot down his plane…."

- Dares-Salaam is in Tanzania, not Burundi.
- To date, there has been no definitive resolution as to who shot the plane down.

Depth of research

As a long time Rwanda watcher and author, I would recommend but one book as a must have for such a paper: Human Rights Watch, *Leave None to Tell the Story.*

Cloaking reality in hyperbole and doubtful analysis

The article is a classic case of making reality fit academic theory by cloaking reality in hyperbole and doubtful analysis. I would summarize by offering my own questions to resurface the reality of Rwanda.

- Genocide as an act of "*frenzy"*? You don't kill 11 percent of a population of 7 million in 100 days using small arms and machetes in a "frenzy." The Rwandan genocide was a coldly calculated act of political murder applied on a massive scale.
- Only a "*victor's justice*"? In the case of genocide committed during a civil war, as in Rwanda, exactly how and when should the post-genocide government offer amnesty? The signed Arusha Accords provided *defacto* and *dejure* amnesty for the new government that was to be formed under them.
- "*Like the former Hutu regimes, the RPF killed or exiled its adversaries*?" A statement that the current government is no different than the previous regime is morally bankrupt. Has the RPF reacted against its enemies? Yes. Has the RPF *stacked one million bodies? No.*

● *"The policies of the current regime neither include nor forgive Hutus. They do not recognize that throughout the civil war both sides committed atrocities against each other"*? There have been and still are Hutus in the government and in the military. Paul Kagame told me personally that revenge killings had taken place. I knew RPA officers who went to prison for such events.

● "*The failure to grant amnesty has mired the reconciliation process*"? Frankly I was amazed at the restraint shown and my amazement grew over time. I would say that Rwanda is truly remarkable for the progress it has made since the genocide ended. One thing is relatively certain: for better or for worse no one man is more important to Rwanda than Paul Kagame. "Mired" is simply not a word I would apply to him or his leadership.

**Rwanda, UNAMIR Mandate*, United Nations.

Rwanda

COL Rick Orth, *USA, Retired,* (*Sub Saharan Africa Foreign Area Officer)*—The study of Rwanda has much to offer professional military officers, especially about civil war, genocide, difficulties of peace support operations, insurgency, counterinsurgency, and lastly how a post-conflict country rebuilt itself despite the good intentions of the international community. I have over 14 years working Rwandan issues, either directly or indirectly, first as an intelligence analyst covering Central Africa (1994-1996), then as the Defense Attaché to Rwanda (August 1996-October 1998), culminating as the military advisor to the Assistant Secretary of State for African Affairs (August 2006-May 2008). I wrote three articles concerning Rwanda: "Four Variables in Preventive Diplomacy: Their Application in the Rwanda Case," *Journal of Conflict Studies*, Spring 1997; "African Operational Experiences in Peacekeeping," *Small Wars and Insurgencies,* Winter 1996; and "Rwanda's Hutu Extremist Genocidal Insurgency: An Eyewitness Perspective." Major Jeffery H. Powell's recent *Military Review* article, "Amnesty, Reintegration, and Reconciliation," unfortunately distorts the valuable lessons Rwanda has to offer due to factual errors and flawed analysis. Detailed research might have alleviated these problems.

Factual Errors. The Rwandan case is complex and nuanced just as Rwandan society; therefore, any study requires in-depth research, which was apparently not done when writing this article: *"a genocidal frenzy"* the Rwandan genocide was not. Rather the Rwandan government used genocide as an instrument of counterinsurgency against the Rwandan Patriotic Front/Army. The Habyarimana government trained the militia (INTERAHAMWE) of the MRND party in insurgency and terrorist techniques. It planned on launching an insurgency/terrorist campaign against the Broad Based Government that would come to power as a result of the Arusha Accords signed in August 1993. Additionally, the government sponsored a sophisticated propaganda campaign targeting the peasant population. Furthermore, Rwanda historically is an ordered society respecting authority. The Hutu extremists who planned, then commanded, the genocide used these tools in a methodical manner.

"The Belgians, for instance, designated Tutsis as the administrators and Hutus as the workers under their rule." The Germans and Belgians initially relied on the ruling elite in Rwanda; they did not designate, but reinforced, the Tutsi already in power. Incidentally, The Rwandan Kingdom existed centuries before the Germans colonized Rwanda in the late 1890s. In fact, the areas of Gisenyi and Ruhengeri (later to become bastions of Hutu extremism) remained Hutu controlled and the Mwami (Rwandan king), only exerted control of these areas with the aid of German colonial troops.

"*The genocide law passed in 1996 determined four levels of interahamwe*." The 1996 Genocide Law determined four levels of genocidaire, not INTERAHAMWE. The author failed to mention the 100,000s in Rwanda jails accused of genocide and the huge burden this had on the Rwanda justice system, the government's use of Gacaca to ease the case back log.

Flawed Analysis. Using a model "amnesty, reintegration, and reconciliation AR2," and then trying to make the Rwandan case fit, distorted the reality of the Rwandan case presented in this article.

"*The RPF also has not acknowledged facts pointing to the illegal actions of some members of the RPA during the conflict and the possible need to grant amnesty to them as well*." This sounds much like the criticism of human rights activists and does not take into account the hundreds of RPA/RDF officers and soldiers sitting in military jails or since released having served their sentences for crimes against the Rwandan people. Then there are those who were executed under the RPA Code of Military of Justice, again criticized by the International Community, for criminal acts against the population. The system is not perfect but it is not one of impunity either.

"And without amnesty, reintegration, and reconciliation, Rwanda will face bleak prospects in the future, which could include another civil war. . . . The policies of the current regime neither include nor forgive Hutus." Rwanda has had a policy of reintegration. While the policy does not fit the AR2 model and is not perfect, the Rwanda experience has proven successful. Concerning *Ingando camps,* in early 1998 over 1,700 EX-FAR completed reorientation training. From this group over 400 were screened and immediately joined the RPA to fight the EX-FAR and INTERHAMWE. These new counterinsurgents knew the physical geographic and social terrain and, thus, defeated the insurgents. More recently, one of the biggest acts of forgiveness was the incorporation of a key EX-FAR Brigadier General into the Rwandan Defense Forces (the Government changed the name of the Rwandan Patriotic Army). If this is not amnesty, then what is?

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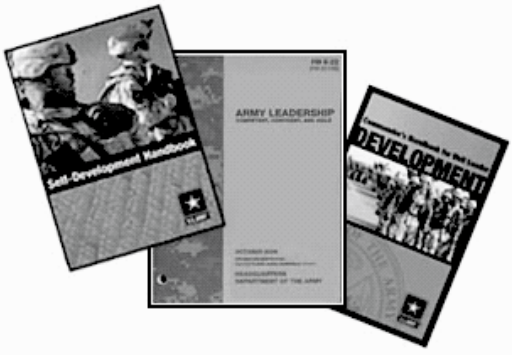

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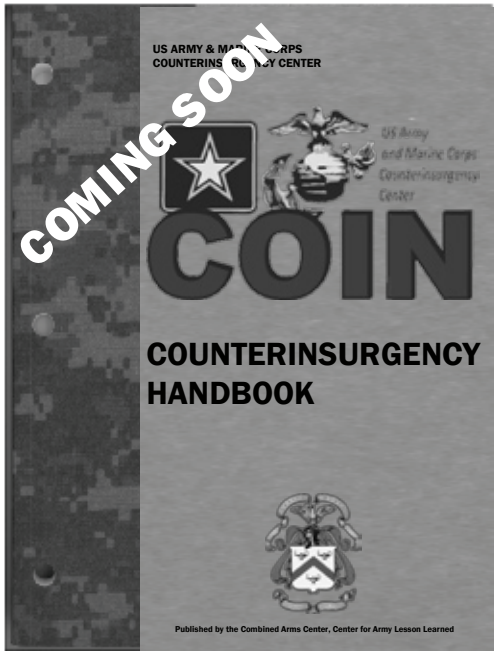

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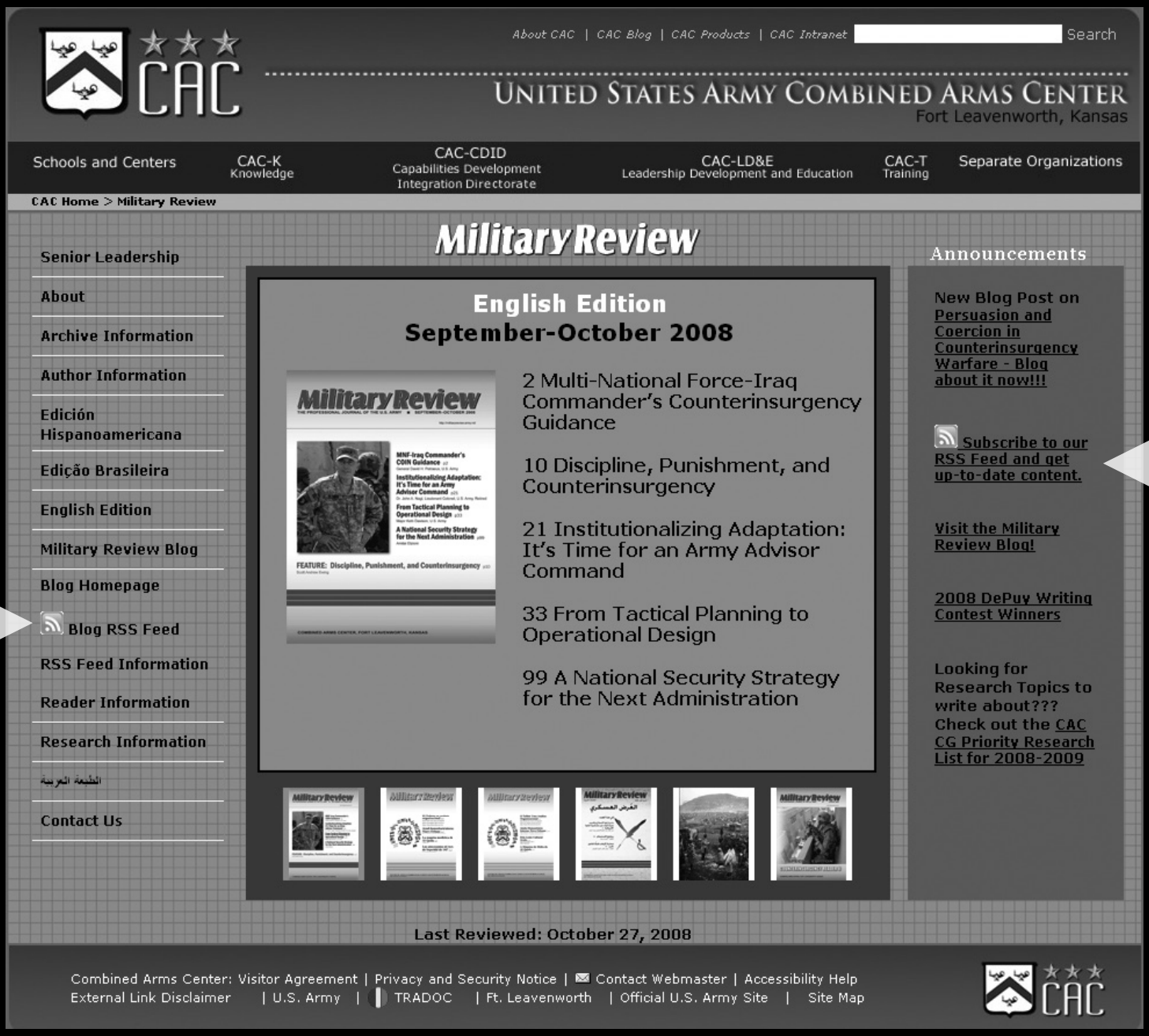

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Year of the NCO 2009

Military Review is seeking quality articles written by and about Noncommissioned Officers of the United States Army. As the Secretary of the Army has declared 2009 to be the "Year of the NCO," the U.S. Army Combined Arms Center will contribute to this initiative by publishing worthy NCO-related stories on a wide variety of topics, including the roles, norms, and values of the NCO Corps; history; leadership development; the sergeant's role in training and current operations; and the vision for NCOs as the backbone of the Army.

See the *Military Review* website at http://militaryreview.army.mil for more details on how to submit articles for consideration.

SGT Lisa Morales, 11th Signal Brigade, and fellow competitors write a warning order.
In 2008, Morales was the first female NETCOM Soldier to win Forces Command NCO of the Year.

U.S. Army War College
STRATEGIC LANDPOWER
Essay Contest 2009

The United States Army War College and the United States Army War College Foundation are pleased to announce the annual **STRATEGIC LANDPOWER** Essay Contest.

The topic of the essay must relate to "Perspectives on Stability Operations and Their Role in U.S. Landpower."

Anyone is eligible to enter and win except those involved in the judging. The Army War College Foundation will award a prize of $3000 to the author of the best essay, a prize of $1500 to the second place winner, and $500 to the third place winner.

For more information or for a copy of the essay contest rules, contact:
Dr. Michael R. Matheny, U.S. Army War College, Department of Military Strategy, Planning and Operations, 122 Forbes Avenue, Carlisle, PA 17013-5242 (717) 245-3459, DSN 242-3459, michael.matheny@us.army.mil

STRATEGIC LANDPOWER Essay Contest Rules:

1. Essays must be original, not to exceed 5000 words, and must not have been previously published. An exact word count must appear on the title page.

2. All entries should be directed to: Dr. **Michael R. Matheny, USAWC Strategic Landpower Essay Contest, U.S. Army War College, Department of Military Strategy, Planning and Operations, 122 Forbes Avenue, Carlisle, PA 17013-5242.**

3. **Essays must be postmarked on or before 17 February 2009.**

4. The name of the author shall not appear on the essay. Each author will assign a codename in addition to a title to the essay. This codename shall appear: (a) on the title page of the essay, with the title in lieu of the author's name, and (b) by itself on the outside of an accompanying sealed envelope. This sealed envelope should contain a typed sheet giving the name, rank/title, branch of service (if applicable), biographical sketch, social security number, address, and office and home phone numbers (if available) of the essayist, along with the title of the essay and the codename. This envelope will not be opened until after the final selections are made and the identity of the essayist will not be known by the selection committee.

5. All essays must be typewritten, double-spaced, on paper approximately 8 ½"x11". Submit two complete copies. If prepared on a computer, please also submit the entry on an IBM compatible disk, indicating specific word-processing software used.

6. The award winners will be notified in early Spring 2009. Letters notifying all other entrants will be mailed by 1 April 2009.

7. The author of the best essay will receive $3000 from the U.S. Army War College Foundation. A separate prize of $1500 will be awarded to the author of the second best essay and a prize of $500 will be awarded to the author of the third place winner.

The Medal of Honor

Specialist
Ross A. McGinnis
United States Army

The family of U.S. Army Specialist Ross A. McGinnis accepted the Medal of Honor, awarded posthumously, during a ceremony at the White House on 2 June 2008. He was also posthumously promoted from Private First Class to Specialist.

For conspicuous gallantry and intrepidity at the risk of his life above and beyond the call of duty:

Private First Class Ross A. McGinnis distinguished himself by acts of gallantry and intrepidity above and beyond the call of duty while serving as an M2 .50-caliber machine gunner, 1st Platoon, C Company, 1st Battalion, 26th Infantry Regiment, in connection with combat operations against an armed enemy in Adhamiyah, Northeast Baghdad, Iraq, on 4 December 2006.

That afternoon his platoon was conducting combat control operations in an effort to reduce and control sectarian violence in the area. While Private McGinnis was manning the M2 .50-caliber machine gun, a fragmentation grenade thrown by an insurgent fell through the gunner's hatch into the vehicle. Reacting quickly, he yelled "grenade," allowing all four members of his crew to prepare for the grenade's blast. Then, rather than leaping from the gunner's hatch to safety, Private McGinnis made the courageous decision to protect his crew. In a selfless act of bravery, in which he was mortally wounded, Private McGinnis covered the live grenade, pinning it between his body and the vehicle and absorbing most of the explosion.

Private McGinnis's gallant action directly saved four men from certain serious injury or death. Private First Class McGinnis's extraordinary heroism and selflessness at the cost of his own life, above and beyond the call of duty, are in keeping with the highest traditions of the military service and reflect great credit upon himself, his unit, and the United States Army.

President George W. Bush
Commander in Chief

For more information, see http://www.army.mil/medalofhonor/mcginnis/