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Army Transformation: Implications for the Future

Cognitive Transformation and Culture-Centric Warfare

More than a year after the Iraq war began soldiers are rotating home with a sense of unmet expectations. Consensus seems to be building among them that this conflict was fought brilliantly at the technological level but inadequately at the human level. The human element seems to underlie virtually all of the functional shortcomings chronicled in official reports and media stories: information operations, civil affairs, cultural awareness, soldier conduct...and most glaringly, intelligence, from national to tactical.

Technological failures are easy to identify and fix. Human failures are very hard. The human element in war is not a system built using the laws of empiricism but a collection and fusion of seemingly independent thoughts and actions that combine together to influence events on the battlefield. The American military is not accustomed to finding collective solutions to address human failures. But this war has shown that the development of such an approach is absolutely essential and long overdue.

I asked a returning commander from the Third Infantry Division about how well situational awareness (read aerial and ground intelligence technology) worked during the march to Baghdad. "I knew where every enemy tank was dug in on the outskirts of Tallil", he replied. Only problem was my soldiers had to fight fanatics charging on foot or in pickups and firing AK 47s and RPGs. I had perfect situational awareness. What I lacked was cultural awareness. Great technical intelligence...wrong enemy."

This officer's prescient remark presaged the difficulties that would be encountered during the present "cultural" phase of the war where intimate knowledge of the enemy's motivation, intent, will, tactical method and cultural environment has proven to be far more important for success than the deployment of smart bombs, unmanned aircraft and expansive bandwidth. Success in this phase rests with the ability of leaders to think and adapt faster than the enemy and for soldiers to thrive in an environment of uncertainty, ambiguity and unfamiliar cultural circumstances.

Recent experience in Iraq reinforces the truism that the nature of war is changing. Fanatics and fundamentalists in the Middle East have adapted and adopted a method of war that seeks to offset America's technical superiority with a countervailing method that uses guile, subterfuge and terror mixed with patience and a willingness to die. This approach allows the weaker to take on the stronger and has proven effective against western style armies. Since the Israeli war of independence Islamic armies are 0 and 7 when fighting western style and 5 and 0 (or 5-0-1 if this war is included) when fighting unconventionally against Israel, the United States and the Soviet Union.

Yet the military still remains wedded to the premise that success in war is best achieved by creating an overwhelming technological advantage. Transformation has been interpreted exclusively as a technological challenge. So far we have spent billions to gain a few additional meters of precision, knots of speed or bits of bandwidth. Some of that money might be better spent in improving how well our military thinks and studies war in an effort to create a parallel transformational universe based on cognition and cultural awareness. War is a thinking man's game. A military all too acculturated to solving warfighting problems with technology alone should begin now to recognize that wars must be fought with intellect. Reflective senior officers returning from Iraq and Afghanistan have concluded that great advantage can be achieved by out thinking rather than out equipping the enemy. They are telling us that wars are won as much by creating alliances,

leveraging non military advantages, reading intentions, building trust, converting opinions and managing perceptions, all tasks that demand an exceptional ability to understand people, their culture and their motivation.

Clearly these imperatives place an increased premium on the ability of America's military to understand the nature and character of war as well as the cultural proclivities of the enemy. Yet increasingly military leaders subordinate the importance of learning about war to the practical and more pressing demands of routine day to day operations. In a word, today's military has become so overstretched that it may become too busy to learn at a time when the value of learning has never been greater. What follows is a partial list of initiatives that collectively will cost little but if taken together will increase American combat proficiency far out of proportion to its cost. Implementing only a few of these initiatives will go a long way to creating an environment conducive to fighting an enemy in this emerging era of culture-centric warfare.

Transform the Operational and Tactical Intelligence Services

Recriminations concerning the failure of the intelligence services to find weapons of mass destruction in Iraq cloud what is certainly a more significant failure of lower level intelligence. Once the kinetic phase of the fighting in Iraq ended soldiers and Marines found themselves immersed in an alien culture unable to differentiate friend from foe or to identify those within the population they could trust to provide useful and timely tactical intelligence. The military relied on intelligence gathering tools and methods left over from the cold war. A technical intelligence specialist sitting in Maryland could exploit data collected from overhead sensors to count vehicles, spot convoy movement or report on the level of telephone traffic half way around the globe. But in spite of good intentions a technical specialist cannot begin to divine how the enemy intended to fight. Today the enemy's motives often remain a mystery and the cost in casualties due to the inability to understand the enemy and predict his actions has been tragically too great.

The military possess the technological means in Iraq to conduct net-centric warfare to proficiency unparalleled in the history of warfare. But it lacked the intellectual acumen and cultural awareness and knowledge of the art of war to conduct culture – centric warfare. Focus on the art rather than the science of war becomes necessary to secure success when an enemy adapts and finds ways to obviate the advantages of net-centric warfare. His networks consist of tribal connections and isolated terrorist cells. Sensors, computer power and bandwidth count for little against an enemy who communicates by word of mouth and back alley messengers and fights using simple weapons that do not require networks or sophisticated technological integration to be effective.

After a slow start tactical intelligence units in Iraq slowly managed to close the information gap. Most useful information came from within the battalions and brigades that had to quell resistance in the cities and towns. Information came from payoffs to local tribal leaders, back alley deals, and intense interrogations. With time to build trust tips offered by citizens became more common. But the layers of informational agencies above tactical provided very little that was current and relevant enough to be “actionable”.

The lessons of this failure are clear. Computers and aerial drones are no substitute for human eyes and brains. The density of soldiers who do “eyes on” reconnaissance must be increased. The intelligence function in today’s military is too thick at the top and too thin at the bottom. Bureaucrats in the three letter agencies provide little that’s useful to soldiers in harm’s way. This condition must change. Reform of the entire intelligence function strategic to tactical must concentrate on compressing layers and pushing both collection and analysis downward. The focus of every agency must be at the tactical level. In today’s operational environment if information is of little practical use if it doesn’t benefit the soldier in contact.

In the late nineteenth century the British Army created a habit of “seconding” bright officers to various corners of the world so as to immerse them in the cultures of the Empire and to become intimate with potentates from Egypt to Malaya. Names like China Gordon and T E Lawrence testify to the wisdom of such a custom. Even today the British Army has an advantage over the United States in that they possess officers with the ability to move comfortably between and within the inner circles of foreign militaries. Great Britain’s relative success in Basra is due in no small measure to the self-assurance and comfort with foreign culture derived from centuries of practicing the art of soldier diplomacy and liaison.

The American Army can learn much from its closest ally. Soldiers who spend time overseas deeply immersed in foreign cultures particularly those cultures most likely to become engaged in conflicts of strategic importance to the United States should be rewarded rather than punished for their efforts. At the heart of a cultural-centric approach to future war would be a cadre of global scouts, well educated, with a penchant for languages and a comfort with strange and distant places. These soldiers should be given time to immerse themselves in a single culture and to establish trust with those willing to trust them.

A means for creating more global scouts might be a sponsorship programs by the services that require and provide funds for officers and NCOs to spend long periods immersed within foreign cultures. They would be expected to graduate from foreign staff colleges and to stay for extended periods within the countries, not just a few years but perhaps decades with no diminution in career progression. To ensure that these designated “global scouts” do not interfere or compete with existing service personnel requirements the services would be permitted to add the end strength and funding required to permit a significant number of officers to participate in programs that improve awareness of alien cultures without threatening officers following conventional careers.

A successful global scout initiative would require a change of culture within the military intelligence community. In the hierarchy of command the scouts would take front and center over the intelligence technologists. A culture-centric rather than a net-centric approach to intelligence collection would demand a fundamental change in how intelligence specialists are selected, trained and promoted. A shift in focus from a technological to a cognitive approach to intelligence would give priority to those who are able to devote time to studying war and who are capable of immersing themselves in theaters of war.

Global scouts must be supported and reinforced with a body of intellectual fellow travelers within the intelligence community who are formally educated in the deductive and inductive skills necessary to understand and interpret intelligently the information

and insights provided by scouts in the field. They should attend graduate schools in disciplines necessary to understand human behavior and cultural anthropology. In addition officers from other government agencies that routinely ally themselves with the military and perform essential functions in this new era of warfare should be required to attend military schools specifically designed to improve the interagency function in war. Students and faculty would come from all government agencies to include the departments of State, Treasury, Homeland Security, Agriculture, as well as the permanent staffs from the White House and Congress. Military attendees would include professionals from foreign area, civil and public affairs, special forces, and information operations specialties. These schools would be of such quality and intellectual integrity that they would attract attendees from the media and domestic and international non government organizations such as the Red Cross and Doctors without Borders.

Reform the Military Learning Systems

This new era of war requires soldiers equipped with exceptional cultural awareness and an intuitive sense for the nature and character of war. Where should this culture centric learning take place? Unfortunately higher-level military colleges and schools fail to meet the learning needs of the services. Very few military leaders are fortunate to be selected to attend institutions that teach war. Those selected are chosen based solely on job performance rather than for the excellence of their intellect. Personnel policies affecting the purpose of senior military education have transformed these institutions partly into meeting places intended to achieve interservice, inter agency and international comity. The price for socialization has been a diminishment in the depth and rigor of war studies within these institutions. Thus the central elements necessary to gain a deeper understanding of the nature and character of war, military history (primarily) along with war games and military psychology and leadership, often are slighted in an effort to teach every subject to every conceivable constituency to the lowest common denominator.

First, every military leader, particularly those whose job is to practice war, must be given every opportunity to study war. Learning must be a life-long process. Every soldier regardless of grade or specialty should be given unfettered and continuous access to the best and most inclusive programs of war studies. Every soldier who takes advantage of the opportunity to learn must receive recognition and professional reward for the quality of that learning. Contemporary distance learning technology allows the learning process to be amplified and proliferated such that every soldier can learn to his or her capacity and motivation.

The latest distance learning technology also permits military students to learn in groups, virtual seminars, even when on the job in some distant theater of war. The task of learning should therefore maximize the sharing and distribution of learning. Our officers and NCOs understand this phenomenon. The remarkable success of web sites like companycommander.com and platoonleader.com testify to the need that young leaders have to learn by sharing. Soldiers should have the opportunity to learn continuously. Scholars have long known that learning is life long not episodic. Therefore, soldiers should become members of a web-based community of learners from the moment they join the service.

Second, those who demonstrate exceptional brilliance and whose capacity for higher level strategic leadership is exemplary should be afforded a unique opportunity to expand their knowledge to a degree unprecedented in the past. In this scheme the traditional staff and war colleges would focus attention exclusively on a constituency selected principally on intellectual merit. Every officer would be given the privilege of competing for a seat in these selective courses in residence. The courses would be dedicated exclusively to the study of war. The opportunities for attendance would be limited. The pedagogical model for the school would be based on the very successful advanced seminars already extant at all service schools (known within the Army as the School of Advanced Military Studies at the intermediate level and the Advanced Strategic Art Program at the senior level.)

The military has too few learning resources to train and educate its leaders adequately. The commodity in shortest supply is time. Soldiers are often too busy to learn and for that reason learning has taken a back seat to action in today's operationally focused force. The Army has made very little of an investment in private universities as a means for preparing officers to understand foreign cultures or to study the art of war. In 1976 the Army sent 7,400 officers to fully funded graduate school. Today the Army sends only 396, half of whom are en route to West Point. The other half are studying science and engineering to prepare for Acquisition Corps assignments.

The Army must create a new learning environment centered on the student rather than the institution. Every learning opportunity should be crafted to ensure that the right methods, both pedagogical and methodological are used to give the military learner just what's needed when it's needed using a suitable blend of site and web based delivery. Every concession must be made to lessen the burden of learning. First preference should be given to learning at home over the web. The schools should be held responsible for monitoring and assessing the quality of the student's achievement while minimizing time students spent away in some distant classroom.

Learning as a command responsibility.

During the last decade corporations have learned the value of educating their employees. Increasingly some of the best managed companies have created chief learning officers and have given managers the responsibility to ensure that their subordinates are properly prepared intellectually to transition to new levels of responsibility. The military can learn from this example. Soldiers do best what commanders demand from them. Commanders focus energy on what their higher level commanders deem to be most important. In the past responsibility for learning has been relegated to military learning institutions. If we are to create a body of leaders in the future capable of fighting asymmetric wars responsibility for learning must be shifted to those most responsible for success—unit commanders.

Unit-based learning and leader development must be perceived as a condition for unit readiness overall. More stable home basing and a cycled rotation system now under development in the Army and extant in other services will allow enough scheduled down time for commanders to establish and actively superintend a disciplined study program for junior officers and non commissioned officers. A method for monitoring the time

devoted to professional development must be established by a disinterested authority divorced from service personnel systems such as the joint staff.

The level of responsibility for critical decision-making in the services continues to drift downward. Today sergeants make strategic decisions that only a decade ago were reserved for officers of very senior grade. In Afghanistan, special forces sergeants succeeded in defeating the Taliban by establishing trust and mutual effort between the Northern Alliance and U S forces. Sergeants called in precision strikes from strategic bombers that proved so successful in breaking the back of Taliban resistance. Thus non commissioned officers must be educated as well as trained for this new style of war. All NCOs should be given cultural and language training. Those with the greatest promise should be offered the opportunity to pursue the study war either in advanced military or civilian educational institutions.

Leverage Learning Science to Find Those Best Suited to Fight Culture-Centric War

History teaches that great combat commanders have one trait in common. They possess a unique, intuitive sense of the battlefield. They have the ability to think in time, to sense events they cannot see, to orchestrate disparate actions such that the symphony of war is played out in exquisite harmony. Perhaps no more than one in a hundred among many superbly qualified commanders has this unique gift. Often those with the operational “right stuff” are found only by accident. Commanders at the National Training Center often observe that it is the most unlikely commanders who perform well in the heart of battle. Perhaps they lack a certain pedigree, are rough around the edges, perhaps even profane...but they know how to fight.

In the past the only sure venue for exposing the naturals was in battle. Soldier’s lives had to be expended to find commanders with the right stuff. But today learning science offers the ability to identify those who can make decisions intuitively in the heat of battle. The Germans called this gift “*fingerspitzengefühl*” or finger tip sense. Many managers can make the right decision if given enough time, advice and data. But only combat leaders can make the right decision at the right time in a crisis when the fog of war is greatest: when tired, fearful, and isolated.

But learning science today offers the opportunity to find the naturals without bloodshed. The services must exploit this science by conducting research in cognition, problem solving, and rapid decision making in uncertain, stressful environments like combat. Leaders must be exposed during peacetime to realistic simulations that replicate conditions of uncertainty, fear and ambiguity such that those who demonstrate *fingerspitzengefühl* are identified early, perhaps as early as commissioning. Those with the right stuff should be cultivated and exercised continuously to sharpen their decision making prowess before they lead soldiers into real combat.

Military intellectual institutions must conduct research into a greatly expanded effort to understand the cognitive decision-making process. As much attention should be given to understanding how culture-centric systems interpret and use data as to how net-centric systems collect data. We need to better understand what information really is necessary for making decisions. Important in this effort is an understanding of how different commanders use information. Cognitive systems capable of customizing the decision-making process will emerge from that understanding. Perhaps soon commanders

will be offered exercises and decision aids that will optimize their ability to make the right decisions in the midst of a mountain of information that will invariably descend on them in the heat of battle.

The requirement to better anticipate and shape performance in battle is made all the more challenging by today's conflict environment. Good commanders know how to lead in combat. Great commanders possess the unique intuitive sense of how to transition very quickly from active, kinetic warfare distinguished by fire and maneuver to a more subtle kind of cultural warfare distinguished by the ability to win the war of will and perception. Rare are the leaders who can make the transition between these two disparate universes and lead and fight competently in both.

Recently I attended a service specific wargame that was intended to examine the course of future war. The scenario was placed in the Middle East. I noted that all of the players, red and blue, were either American or NATO allies. I asked if perhaps it would be a good idea to include participants from Moslem countries particularly in the "red cell". One of the game directors replied to my suggestion: Oh, we tried that two years ago but those guys became too disruptive." Right. "Disruption" or the need to create uncertainty should be the aim of wargaming. As a matter of course every exercise, game and major joint training event should add uncertainty and unpredictability in the form of alien representation. Otherwise games become exercises scripted through the preconceptions and biases of western culture.

Acculturate Every Soldier to Prospective Theaters of War

One division commander in Iraq told me that his greatest worry was that his soldiers comprised "an army of strangers in the midst of strangers". During the early months of occupation cultural isolation in Iraq created a tragic barrier separating Iraqis of good will from the inherent goodness that American soldiers demonstrated so effectively during previous periods of occupation in such places as Korea, Japan and Germany. This cultural wall must be torn down. Lives depend on it.

Every young soldier should receive cultural and language instruction. The purpose would not be to make every soldier a linguist but to make every soldier a diplomat in uniform equipped with just enough sensitivity and linguistic skills to understand and converse with the indigenous citizen on the street. The mission of soldier acculturation is too important to be relegated to last minute briefings prior to deployment. Acculturation policy should be devised, monitored and assessed as a joint responsibility. Today's e-learning technologies will permit such a program to be distributed over the web. Soldiers should be able to achieve proficiency at home and demonstrate their knowledge using assessment tools administered by DoD or the Joint Staff before any soldier deploys overseas.

The military spends millions to create urban combat sites designed to train soldiers how to kill an enemy in cities. But perhaps equally useful might urban sites optimized to teach soldiers how to coexist with and cultivate trust and understanding among indigenous peoples inside foreign urban settings. Such centers would immerse young soldiers within a simulated Middle Eastern city, perhaps near a mosque or busy marketplace where they would be confronted with various crises precipitated by expatriate role players who would seek to agitate and incite a local mob to violence.

Interagency and international presence would be as evident in these centers as the services and joint agencies with perhaps a State Department, CIA or allied observer controller calling the shots during an exercise.

To assist in the acculturation process the Department of Defense should be required to build databases that contain the religious and cultural norms for world populations—to identify the interests of the major parties, the cultural taboos--so that soldiers can download the information quickly and use it profitably in the field.

Cognitive Reform is Hard

In a strange twist of irony the demands for overseas deployments today have created a military too busy to learn at a time when the uncertainties of contemporary warfare demand that military professionals spend more time in reflective study. At a time when the military requires a more flexible and vibrant learning environment the educational systems imbedded in the military have become more ossified and bureaucratic. Very few learning executives have any experience with the learning profession. Most are operators who dip periodically into military education or long service civilian bureaucrats whose interest often is to preserve the sanctity of the academy rather than to serve the needs of the soldier. Senior leaders often view the learning process as a means to fulfill educational requirements with as little interruption as possible in rotation schedules to operational assignments.

A process of cognitive transformation cannot be accomplished in uncoordinated bits and pieces as it is today. Neither can the services be relied upon to put forth the resources in time and money necessary to accomplish such a comprehensive transformation. If done right, cognitive and cultural transformation might well demand change as sweeping and revolutionary as the Goldwater-Nichols Amendment. The end state of this effort should be nothing less than a revolution in learning throughout the Department of Defense. This much is clear from past efforts, however: reform of this magnitude is essential, long overdue and undoable without the commitment of the entire military intellectual community.