

Reflections on the Human Terrain System During the First 4 Years

BY MONTGOMERY MCFATE AND STEVE FONDACARO

he Human Terrain System (HTS) is a U.S. Army program that recruits, trains, and deploys mixed military and civilian Human Terrain Teams (HTTs), which embed with military units in Iraq and Afghanistan. These teams conduct social science research about the local population to provide situational awareness to the military and "enable culturally astute decision-making, enhance operational effectiveness, and preserve and share socio-cultural institutional knowledge."¹ The teams rely on the HTS Research Reachback Center to provide secondary source research and

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the Mapping the Human Terrain Toolkit (MAP– HT) to support analysis, storage, and retrieval of sociocultural information.

During the first 4 years of its existence, HTS was surprisingly successful in addressing the requirements of Army and Marine units downrange. In the words of the brigade commander of 56th Stryker who worked with a team in Iraq in 2008, "If someone told me they were taking my HTT, I'd have a platoon of infantry to stop them. . . . The HTT has absolutely contributed to our operational mission. Some things we've looked at—solving problems in a lethal manner—we've changed to nonlethal options on the basis of the HTT information."²

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> Despite the positive reception by the deployed military units, HTS was controversial with certain elements of the defense intelligence community and with some academics.³ For example, the Executive Board of the American Anthropological Association found that HTS was "an unacceptable application of anthropological expertise."⁴ The controversy that surrounded HTS generated substantial media coverage and prompted a vigorous discussion about the application of social science to national security issues.

> Until a story appeared about HTS on the cover of the *New York Times* in 2007, almost nobody had heard of the program.⁵ HTS started quietly with a set of PowerPoint slides and no budget. Within 4 years, we:

- transitioned HTS from a "good idea" to an institutionalized Army program
- expanded HTS from a 5-team proof of concept to a 30-team program
- developed HTS from an unresourced concept to a program with a \$150 million a year budget
- expanded HTS from a small group of colleagues to an organization with over 530 personnel
- developed the MAP-HT Toolkit from a nonfunctioning prototype to a fully accredited system in use in Afghanistan and Iraq
- designed, developed, and implemented a training program to prepare HTTs for deployment.

All this was done simultaneously rather than sequentially with a skeleton staff.⁶

During the first 4 years of the program, Montgomery McFate was the Senior Social Scientist and Steve Fondacaro was the Program Manager. Both of us left HTS in 2010. At the end of the first 4 years of the program, we have a rare moment to reflect on our experiences. This article places HTS in historical context as an example of the military's adaptation to the wars in Afghanistan and Iraq, and then explores the relationship between social science and military intelligence, utility of social science for military operations, importance of sociocultural knowledge in Phase Zero, and unintended consequences of current Army rotation policy.

Identifying the Problem

HTS came into existence at a moment when the Department of Defense (DOD) was adapting to the challenges posed by the wars

in Afghanistan and Iraq. These wars showed that the whole-of-government approach remained more of an ideal than a reality. The decision to invade Iraq was not supported by adequate research or understanding of the economic, political, historical, or social context, though senior leaders such as General Eric Shinseki pointed out shortfalls.⁷ When major combat operations ended in Iraq in May 2003, the consequences of limited planning and ad hoc implementation of postwar stability and reconstruction operations quickly became apparent. Because neither the Department of State nor other agencies of the U.S. Government were able to effectively engage in nation-building due to the security environment and regulatory hindrances, these tasks fell by default to the military. As General David Petraeus once noted, "We looked around for someone to pass the ball to when major combat operations were finished, and there was no one there."8 In effect, the military assumed many of the functions of the Department of State and began performing many activities that were neither their official duties nor within their domain of expertise, such as setting up a local banking system, deworming sheep, and mediating water rights disputes between tribes, to name a few.

In addition to the new governance tasks the military inherited, counterinsurgency (COIN) operations posed unique challenges for U.S. forces. To fight an insurgency effectively, the military must conduct combat operations, reduce support for the insurgents within the population, and increase support for the legitimate host-nation government. Since Field Marshal Gerald Templer coined the phrase during the Malayan Emergency, *hearts and minds* has been used to describe a central task of COIN: engaging the local population in order to win their trust and negate their support for insurgent organizations. A critical first step in civilian engagement is determining the legitimate power holders in the community, and through them addressing the interests and grievances of the population they represent. The problem in Iraq (and to a lesser degree in Afghanistan) is, as Lieutenant Colonel Richard Welch observed:

Several thousand Iraqis claimed to be real tribal leaders when the actual number is just a few hundred and the number of key top tribal leaders is less than a dozen. The problem with this is that, if the Coalition supports an illegitimate tribal leader that doesn't have a real tribal lineage, then it dishonors the real tribal leaders and alienates them from the Coalition, creating potential enemies or non-support.⁹

The U.S. military, seeking to simplify a situation that it perceived as social disorder and political chaos, redefined the problem as opposing "blue and red" forces and reverted to its traditional comfort zone-kinetic action. This lack of cultural understanding led in some cases to escalation of force or unnecessary violence. For example, in the Western European tradition, a white flag means surrender. Many Marines (rather logically) early in the Iraq war assumed a black flag was the opposite of surrender—"a big sign that said, shoot here!" as one Marine officer pointed out.¹⁰ As a result, many Shia who traditionally fly black flags from their houses as a religious symbol were wrongly considered as the enemy. Conversely, understanding the local culture could often lead to a deescalation of violence and restraint on the use of force. In the words of one Special Forces officer:

Had we understood the cultural role of celebratory gunfire, more than one wedding party would have been spared from fires conducted in self-defense against a perceived threat. While downrange, I tried to impress upon my crew the importance of cultural [intelligence] in the tactical environment. . . . That knowledge enabled us to "retract the fangs" on several occasions, allowing us to identify the behavior of potential threat groups to our ground party as benign.¹¹

military personnel did not have sufficient baseline knowledge to validate the information and derive the conclusions needed to develop courses of action within the staff decision cycle

> These issues—the negative consequences of a lack of cultural knowledge, complexities of engagement in tribal societies, a tendency to resolve issues through kinetic force, and challenges of governance—concerned the small group of us who created HTS. Our hope was that sociocultural knowledge would enable the military to take local perspectives and interests into account in their planning and execution of missions. Perhaps naively, we believed that sociocultural understanding restrains violence rather than enables it.

"An Expensive Footrest"

HTS was born out of a predecessor project called Cultural Preparation of the Environment (CPE). In December 2004, Hriar Cabayan at the Joint Chiefs of Staff J3 (Operations) asked Montgomery to assist with a short-term pilot project, under the sponsorship of the Joint Improvised Explosive Device (IED) Task Force, to collect and organize cultural information in support of Army brigades in Iraq. Software developers, military personnel with recent experience in Iraq, and a variety of social scientists contributed to the CPE. The CPE used Divala Province for the proof of concept, in part because prior research had been done there for the Iraq Training Program, a computer-based predeployment training program created for the Army Assistant Chief of Staff for Operations the previous year. The objective of the CPE was to "provide commanders on the ground with a tool that will allow them to understand operationally relevant aspects of local culture; the ethno-religious, tribal and other divisions within Iraqi society; and the interests and leaders of these groups.... Ultimately, the CPE may assist commanders in making decisions about applying the appropriate level of force."12

In fall 2005, the CPE prototype was fieldtested in Iraq. Since the Joint IED Task Force had sponsored the project, it made sense to fieldtest the prototype with the task force's element in Iraq. Colonel Steve Fondacaro, as officer in charge, was responsible for evaluating a variety of counter-IED capabilities. After testing the prototype, he identified three main problems. First, brigade staffs were already overloaded with gadgets that they had no time to learn, manage, or employ. Thus, the CPE in its current form was likely to become an expensive footrest. Second, military personnel did not have sufficient baseline knowledge to enable them to validate the information and derive the conclusions needed to develop courses of action within the staff decision cycle. Third, military units needed embedded social scientists on their staffs who could do research, derive lessons learned from the unit's experience, and apply them to the development of effective nonlethal courses of action that would make sense to the population.¹³ As a result of the field test in Iraq, the Joint IED Task Force returned the CPE to its headquarters.

Despite this setback, we began looking for a permanent home for the project in the summer of 2005. Because the Joint IED Task Force (which later became the Joint IED Defeat Organization) could not run programs like CPE on a permanent basis, Dr. Cabayan encouraged the team to reach out to other U.S. Government entities that could develop the CPE as an enduring capability. Thus, we met with the State Department Humanitarian Information Unit in March 2005, Army Civil Affairs and Psychological Operations Command in June 2005, Marine Corps Intelligence Activity in July 2005, and so forth. Resulting from the weekly video teleconferences held at the Pentagon, a variety of organizations expressed interest. Because the Army Foreign Military Studies Office's institutional mission aligned with the CPE objectives, we reached out to their parent organization, Army Training and Doctrine Command (TRADOC) Deputy Chief of Staff for Intelligence (DSCINT) to verify its interest. Thus, in March 2006, Montgomery and two colleagues began discussions with Maxie McFarland, the TRADOC DSCINT. McFarland had just completed a year-long tour as the Joint Improvised Explosive Device Defeat Organization (JIEDDO) Senior Executive Service Principal for Intelligence and was supportive. In July 2006, TRADOC DCSINT created a steering committee for the Cultural Operations Research-Human Terrain System, as it was then called, which became the foundation for the HTS program staff.

"Catastrophic Success"

In late 2005, the 10th Mountain Division submitted to the Department of the Army an Operational Needs Statement (ONS), which is a Service component document that articulates the "urgent need for a nonstandard and or unprogrammed capability to correct a deficiency or improve a capability that enhances mission accomplishment."¹⁴ Generally, units submit an ONS for equipment or technology they lack, but rarely if ever is an ONS used to request a human capability.

U.S. forces continue to operate in Iraq without real-time knowledge of the drivers of the behavior within the host population

Subsequently, Multi-National Corps-Iraq signed a Joint Urgent Operational Needs Statement (JUONS) in April 2007. Combined Joint Task Force 82 signed a JUONS later that month, creating a requirement for Afghanistan. U.S. Central Command (USCENTCOM) consolidated the Afghanistan and Iraq JUONS in May 2007. These documents created HTS and established the requirement for teams at brigade and division level in Iraq and Afghanistan. The Afghanistan JUONS and USCENTCOM JUONS are classified and cannot be quoted from here. However, the unclassified Iraq JUONS offers a unique insight into the issues that senior military personnel in Iraq thought were critical in the 2005-2006 timeframe. Noting that "human terrain knowledge deficiencies" exist at all command echelons, the Iraq JUONS observed that "detailed knowledge of host populations is critical in areas where U.S. forces are being increased to conduct counterinsurgency and stability operations in Iraq. U.S. forces continue to operate in Iraq without real-time knowledge of the drivers of the behavior within the host population. This greatly limits commanders' situational awareness and creates greater risks for forces."

Accordingly, the Iraq JUONS established the objectives of the HTS experiment to "improve operational decisions and chances for mission success" through "increased understanding of Iraqi citizens' physical and economic security needs at local/district resolution"; "increased understanding of local ideological, religious, and tribal allegiances"; and "avoidance of unintended second order effects resulting from a lack of understanding of the local human terrain." The Iraq JUONS also noted that it was hoped HTS could help "decrease both coalition force and local national casualties" and "avoid needless loss of life that has occurred due to lack of a systematic process and systems to enable transfer of human terrain knowledge during unit Relief in Place/Transition of Authority."

While the JUONS brought HTS into existence as an organization, it provided no funding. In the private sector, an entrepreneur would approach venture capital firms to raise the money. In DOD, there is no single office and no single process for fundraising. To meet the JUONS requirements, we had to cobble funds together from a variety of sources. Our joke at this time was that we would brief anyone—including the PTA.

In summer 2006, we used the Army ONS as the basis for a proposal to JIEDDO for a \$20 million, 5-team proof of concept.¹⁵ Although we had neither permanent office space nor training facilities, we began training the first HTT with those JIEDDO funds. Operating on the assumption that HTS was going to be a 2-year experiment, we hired staff, coordinated logistics, purchased equipment, recruited team members, wrote a concept of operations, designed the curriculum, and performed the other tasks necessary for startup. A few months after the first team deployed to Afghanistan, however, the newly signed USCENTCOM JUONS increased the requirement for teams from 5 to 26, divided between two theaters. USCENTCOM had decided to put HTS teams at every Army brigade, Marine regiment, and U.S. division in Iraq and Afghanistan and wanted their request expedited to meet the Baghdad surge.¹⁶ This type of requirement is known inside the Pentagon as "fill or kill," meaning that if a JUONS is validated as an "immediate warfighter need," DOD must address the requirements within a fiscal year. In HTS, we referred to this 420 percent increase in the number of teams as a "catastrophic success": while the boost from DOD was gratifying, fulfilling the mandate would stretch a brand-new organization to the limit.

From an organizational perspective, a slower expansion would have allowed us to build a management structure, hire necessary staff, develop procedures, and perform a host of other activities necessary for a new organization. However, since HTS was standing up 4 years into an active conflict (and thus was already late in some regards), was validated as an immediate warfighter need, and had the potential to save lives in Iraq and Afghanistan, the normally sequential developmental tasks had to be done in parallel and completed as fast as possible. Unlike the world of private industry, there was no way to refuse this mandate or slow it down.

Thus, we initiated planning for submission of the HTS concept plan and table of distribution and authorization in November 2007, conducting regular coordination with Army staff throughout the 2-year approval process. We initiated, developed, and approved the HTS mission statement, mission essential task list, collective tasks, and individual tasks. We began redesigning the training curriculum, which had grown organically over the years, to introduce a case study approach and systematize the research and analysis methods portion of the course based on team experiences in theater. We built a Program Development Team to identify best practices, collect lessons learned, and solicit recommendations for program improvements (many of which were implemented, including in-theater management). We developed a contracted social science research and analysis capability in both Iraq and Afghanistan to conduct empirical qualitative and quantitative research to augment that of the teams. In 2010, after a 2-year wait, the HTS table of distribution and authorization was finally approved by the Army, and we received authorization for an Army Program Objective Memorandum base for \$18 million, making HTS a permanent Army program.

Reflections

From concept to capability, development of HTS took only a few years. Like any startup venture, HTS experienced a variety of challenges, including obtaining funding, managing personnel, answering to our oversight executive, and responding to the press. Some of these experiences were painful, such as the death of our colleagues Michael Bhatia, Nicole Suveges, and Paula Loyd. Some of these experiences were hilarious, such as karaoke night at the High Noon Saloon in Leavenworth, Kansas. All of these experiences provide fodder for discussion; however, in the interest of brevity, we focus on the relationship between social science and military intelligence, utility of social science for military operations, importance of sociocultural knowledge in Phase Zero, and unintended consequences of current Army force structure.

The Relationship of Social Science and Intelligence

The first Human Terrain Team deployed in February 2007 to support the $4^{\rm th}$ Brigade

Combat Team of the 82^d Airborne Division at Forward Operating Base Salerno in Khost, Afghanistan. Because HTS was experimental, we wanted the commander to determine where on his staff the HTT should be located, given the unique configuration of his brigade. According to brigade commander Colonel Marty Schweitzer, "The idea to put them in the [intelligence office] turned out to be dead wrong."17 Having the HTT in the intelligence office (commonly called the S2) resulted in overclassification of research,¹⁸ reduced the ability to interact with the rest of the staff, and threatened to draw the HTT into kinetic targeting, an activity that was outside the scope of its mission.

The first deployed HTT was initially collocated with the intelligence office as a result of the natural tendency in military organizations to lump functions together by analogy: HTTs deal in information, and information is like intelligence, so they should be part of the intelligence office. COIN and stability operations, however, require new types of organization. Staff structures

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inherited from the Prussian army do not easily accommodate the complexities of 4th-generation warfare. Recently, military staffs have adapted by creating the Effects Cell, generally known as the Fires and Effects Coordination Cell but also as the Fusion Cell (but distinct from an Intelligence Fusion Center). An Effects Cell pulls together all nonlethal resources on a brigade staff, such as the Provincial Reconstruction Team, U.S. Agency for International Development representatives,

Civil Affairs, and so forth, to evaluate and plan nonlethal operations such as infrastructure repair, governance activities, and agricultural projects.

To execute the nonlethal elements of a brigade's mission, the Effects Cell requires knowledge of the local environment, such as the population's perceptions of the fairness of electoral procedures and the consequences to local communities of reintegration of internally displaced people. Since the HTT mission was to provide sociocultural situational awareness to "enable culturally astute decisionmaking," the HTT was a natural fit within the Effects Cell. It also filled a gap: as one team member in Iraq in 2006 noted, "The S2 doesn't support [Effects Cell] efforts, nobody else supports their intel needs for non-kinetic."19 HTTs, in sum, provided the information about the local community that the Effects Cell could not get from military intelligence. In the words of one brigade civil-military operations officer in Iraq, "The HTT is the non-lethal S2."20

At the time HTS was created, military intelligence primarily collected and analyzed information to produce targets for kinetic resolution. According to joint doctrine, the primary focus of military intelligence is lethal targeting of the adversary, not understanding social context: "the most important role of intelligence in military operations is to assist commanders and their staffs in . . . determining adversary capabilities and will, identifying adversary critical links, key nodes, [high value targets], and [centers of gravity], and discerning adversary probable intentions and likely [courses of action]."²¹

The disarticulation between military intelligence's historic focus on the adversary and the new requirements for broad sociocultural contextual information necessitated by the wars in Iraq and Afghanistan has caused the military intelligence community to do

some soul-searching. Michael T. Flynn, Matt Pottinger, and Paul Batchelor note that the military intelligence community has been focused on the enemy rather than the population: "The tendency is to overemphasize detailed information about the enemy at the expense of the political, economic, and cultural environment that supports it."22 Contextual information about the population is almost entirely absent: "battalion S-2 shops rarely gather, process, and write up quality assessments on countless items, such as: census data and patrol debriefs; minutes from shuras with local farmers and tribal leaders; after-action reports from civil affairs officers and Provincial Reconstruction Teams; polling data and atmospherics reports from psychological operations."23 The authors attribute this failure to focus on the population to a tendency of "intelligence shops to react to enemy tactics at the expense of finding ways to strike at the very heart of the insurgency," a "lack of sufficient numbers of analysts," and an organizational predilection for "killing insurgents which usually serves to multiply enemies rather than subtract them."24

The heart of the matter is that the training and role of intelligence analysts in most military units is to attend to the "red layer," specifically the identification of targets. Most intelligence offices have their hands full with that particular task and are not trained, manned, or organized to undertake investigation of the local sociocultural context.

Because sociocultural information was outside of the domain of military intelligence when we started HTS, we avoided defining the program as an intelligence activity. Defining HTS as an intelligence program would have been simpler (reducing the need for constant explanation inside and outside of the Pentagon) and easier (making fundraising much more streamlined). As one social scientist in Afghanistan noted in 2009:

Publicly I don't know why HTS puts such a strong public emphasis on "social science research," which again just invites unnecessary criticism. . . . I have published peer-reviewed academic articles and have a Ph.D. and so believe I have a pretty good understanding of what real social science research that is academically rigorous qualifies as. I have also been over here and been out enough times where I have been consistently shot at to know that what we are doing is substantively different. . . . We are doing fairly generic data collection and analysis on local socio-political dynamics and applying it for non-kinetic ends.²⁵

Unfortunately, the Pentagon has no snappy phrase for "generic data collection and analysis on local socio-political dynamics." At the time we were building HTS, one could either call it intelligence or social science.

There were also various reasons for framing HTS as a social science program. First, given the vast collection and reporting effort that supports lethal targeting, using HTS to fulfill this function would be redundant and duplicative. Second, the JUONS that brought HTS into existence did not articulate intelligence activities as part of the HTS mission set. Third, the intelligence production process differs significantly from the social science knowledge production process. While the intelligence model separates collection and analysis, HTS follows an academic model whereby the same people collect and analyze information. Social scientists and military intelligence professionals also collect information differently. Human intelligence (HUMINT) collectors search for specific answers to specific questions. As one HTS team member explained, "the challenge for former HUMINTers who have joined HTS is that [they] have to learn to be satisfied with vague answers to vague questions."²⁶ Whereas HUMINT requires highly specific information about individuals in order to capture or kill, social science, as practiced in HTS, seeks broad contextual information for nonlethal purposes. In the words of one social scientist who served on an HTT in Afghanistan:

The [intelligence] process involves identifying gaps in threat-oriented knowledge, tasking collection assets who use specialized techniques to gather information (applying those techniques toward gather[ing] information makes the information "intelligence information" because the act of acquisition affects the very data itself, primarily through its extraction from its context—something the social science purposefully rejects), analyzing patterns in the information (without consultation from its sources—another practice that social science rejects) to determine "best fit," selecting information that falls with "best fit" categories set into pre-conceived structural models (widely rejected by critical theorists out of hand since the 60s, let alone other schools) and then reassessing gaps. Intel is about eliminating danger, not building cooperation.²⁷

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Despite our conviction that social science was different from intelligence, critics noted a variety of "evidence" to support their view that HTS was an intelligence program. First, the program was housed within an intelligence subelement of a training and doctrine asset.²⁸

TRADOC intelligence, however, is not supported by Intelligence Community funds and under the DOD Shared Production Program has no charter to produce intelligence products. Second, the oversight executive for HTS was the Deputy Under Secretary of Defense for Intelligence. However, when HTS was formed, there were few senior officials in the Pentagon who had any interest in the subject. Finding an Under Secretary willing to accept oversight

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> responsibility for HTS was mostly the result of preexisting relationships with staff members who were able to advocate for us up the bureaucratic chain. Third, the "significant likelihood that HTS data will in some way be used as part of military intelligence, advertently or inadvertently" was problematic.²⁹ All research products in the public domain (including ethnographies produced by academic anthropologists) are accessible by intelligence units. The question is whether a report on property law in Afghanistan or the tribal structure of Mosul would be valuable for lethal targeting. The answer is generally no. As Dr. Kathleen Reedy, a social scientist who served on teams in both Iraq and Afghanistan, noted, "HTTs retain control of their data until it is distributed, not collected. They have the same degree of control that any researcher does until that point. As a social scientist, I could ensure that no one received any information that I did not intend them to, and so could be certain that my informants were kept protected."30

Downrange, the relationship between the intelligence office and HTT was sometimes antagonistic and sometimes cooperative depending on the culture of the brigade, its mission, individual personalities, and the local environment. In 2008 in Iraq, we visited one HTT that was having trouble integrating with their brigade as a result of that unit's lethal targeting focus. The brigade S2 viewed the HTT as a threat to his "turf," a misunderstanding that was cleared up after a brief conversation. Another S2 in Iraq who worked with a team in 2009 had a different view: "Typically the brigade relies on intel to provide what the HTT now provides to us. We don't have the knowledge-we haven't been there for a long time. We have no time, and no manpower resources to focus on population and environment. It really helps us out because I don't have the time to dedicate to it. We're so focused on the bad guy."31

When we were building HTS, most of the Intelligence Community was disinterested in sociocultural information. Some elements of the Intelligence Community have now integrated it into their missions.³² For example, the Defense Intelligence Agency established the Socio-Cultural Dynamics Working Group. U.S. Central Command established an Afghanistan-Pakistan Center of Excellence, which contains a Human Terrain Analysis branch. The Under Secretary of Defense for Intelligence made a large investment in sociocultural analysis at the theater-strategic level and established the Defense Intelligence Socio-Cultural Capabilities Council. However, a number of barriers remain. First, political pressure to resolve the war in Afghanistan has apparently caused Major General Flynn's successor, Major General Steve Fogarty, to reject "the need for social, civil and tribal intelligence" and shift the emphasis back to "targeting the enemy."³³ Second, the focus on short-term effects within DOD and the Intelligence Community has sustained the preference for airborne technical collection systems.³⁴ Third, the terms *sociocultural dynamics* and *human terrain* have no shared meaning. The military intelligence community tends to think of these terms as quantitative information about population demographics represented through geographic overlays. DOD tends to think of sociocultural dynamics as modeling and simulation ("methods, models and tools"),³⁵ rather than the type of empirical on-the-ground research required to support military units in combat.

In 2005, we conjectured about the possible bureaucratic outcomes of interjecting social science into a military context: either DOD would embrace social science as a permanent, institutionalized capability separate from intelligence, or intelligence would expand its aperture to include social science as part of its mission, doctrine, and training. This would create a permanent cadre of dedicated professional researchers and analysts and a permanent funding stream for acquiring and archiving this information, which might lead to better preparation for future U.S. military operations overseas. It would mean that someone in the Pentagon would be the oversight executive for this abandoned child called social science, with the authority to evaluate programs and ensure funding.

On the other hand, keeping social science outside of the Intelligence Community would preserve its unique perspective. As one social scientist in HTS noted:

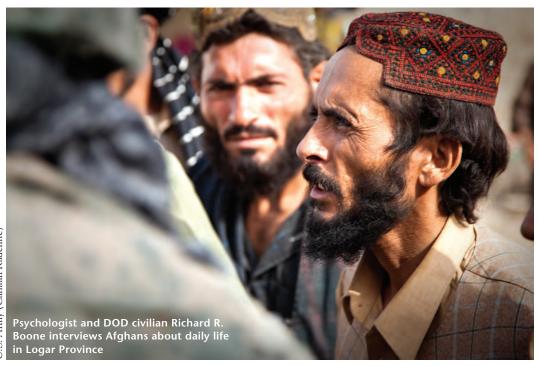
An antagonistic relationship between HTS and intelligence operations fortifies the relevance of both, strengthens their interest in doing methodologically (each to his own) solid work, and increases the military's access to distinctly multiple reporting. . . . One of the best things HTS can do is to approach an issue from completely different and distinct directions, and contradict the perspective of intelligence. That contributes to the [military decisionmaking process] more than hand holding, group thinkers.³⁶

The view that social science perspectives offer a unique, independent perspective has also been echoed by members of military units who have worked with HTTs. In the words of the executive officer for Marine Regimental Combat Team 8, "When you go into a planning process, it's not good to have a consensus view when you're forming a [course of action]. You need to hear new perspectives, and you need people who bring something new to the table. If [the HTT] are too close to intel, you get too much consensus."³⁷

A variety of bureaucratic actors, each with their own agendas, will make a final determination about the fate of social science over the next few years. Our hope is that the potential contributions of social science to the national security decisionmaking process are not overlooked.

Utility of Social Science for the Warfighter

During the development process for the CPE in 2005, our team sent out a data call to the 15 intelligence agencies of the U.S. Government. Our goal was to see whether the ontology we developed worked with real data, assess what information was being collected, and whether what we were proposing was duplicative. In response to our request for information about the tribal structure in Diyala, we received wildly incongruent answers. Some agencies stated there were seven tribes in



Diyala, others said there were hundreds. After conducting preliminary survey research in Diyala, we tentatively identified 15 tribal confederations and 87 major tribal groups in the province.

The paucity of consistent data in the intelligence stream resulted in an epiphany: intelligence agencies were collecting sociocultural data mainly as an afterthought. Collection, when it did take place, was through HUMINT or open source intelligence. Those who collected it were not trained social scientists, and thus the data were subject to a variety of issues, such as validity, reliability, and bias. In effect, U.S. and coalition forces were interacting every day with a population about which they knew little, and we believed some empirical research might help.

Indeed, supported military units frequently commented on the benefits of having social scientists on their staffs. The first common theme was the increased accuracy of data. In the words of a deputy operations staff officer for the 172^d Stryker Brigade Combat Team who spent a tour in Iraq in 2008 working with an HTT, "This is my third rotation, but we've always done a horseshit job at it. We don't have enough patience. Everything we do is focused on security. But they can get after a problem set and be more academic about it. . . . We have a tendency to bullshit and say 'this is how people feel' but having a dedicated academic supported by operators, they can achieve a lot more accurate data."³⁸

The second theme we heard from military units concerned the benefits of analysis. Often, the military used unanalyzed, impressionistic data generated by haphazard research as the basis for decisionmaking. In the words of the assistant chief of staff for operations for II Marine Expeditionary Force (Forward), Multi-National Force–West:

When you all weren't here, we relied upon ourselves to do the requisite research-What is a tribe? How many are there? An economy, [what] makes it sustainable? We were just trying to touch everything build schools, make hospitals work, train governments through the [Provincial Reconstruction Teams], and at the same time fighting the IED fight. . . . The HTT brought folks who were immediately able to look at the problem, identify the causal effects, how this trickles down, and how it [a]ffects population from a security point of view. . . . Now we have a team to do this instead of just a bunch of guys who can shoot well trying to do it.³⁹

The third theme that we heard frequently from military units concerned the benefit of having someone with expert knowledge on their staff. Regional expertise seemed to be less relevant than domain knowledge. For example, the Second Brigade Combat Team, 101st Airborne Division, was supported by an HTT with a political scientist as a team member. According to the civil-military operations officer:

You can take an engineer from the States and they'll compare their pencil protectors—engineering is engineering—but when you get into the political play and how the ballot was designed for the election, you probably ought to have a political scientist on the team. . . . We had no violence [on election] day because we covered it well. It could have very easily tipped the other way, but it didn't because we had the information provided by the HTT that helped the brigade commander make the decisions that made the day successful, and there was no violence because of it.⁴⁰ The fourth common theme was simply that soldiers should perform the military tasks for which they are trained and qualified. Soldiers should be soldiers, not social scientists. According to the French Civil-Military Co-operation/ Civil-Military Operations Officer for Task Force Corrigan, "It's very difficult to train soldiers to be scientists. You can train them to do interviews but they won't have the capacity to make analysis, and that's the most difficult part. . . . It's easier now to take scientists and put them with military. Soldiers when they arrive here are here to fight, not to engage people in discussion about family, religion, and way of life."⁴¹

analysts are not so much in the wrong places as they are starved for the right information

The Intelligence Community has recognized the benefits of having granular sociocultural information. Flynn, Pottinger, and Batchelor assert that military intelligence analysts should focus on the political, economic, and social aspects of the local population at a granular level. However, they note that "these analysts-the core of them bright, enthusiastic, and hungry-are starved for information from the field, so starved, in fact, that many say their jobs feel more like fortune telling than serious detective work."⁴² As a mitigating measure, the authors propose relocating analysts to battalion level and below. However, analysts are not so much in the wrong places as they are starved for the right information. Relocating analysts to the lowest level cannot improve the quantity, quality, or availability of population-based information. As Thomas Marks, a professor at National Defense University, noted: "You can't correctly assess a situation about which you have only second-hand knowledge. . . . Who knew better how the Arab revolt was going, Lawrence or the bureaucrats in Cairo?"⁴³

Despite the benefits to the military of having social scientists conducting research intheater, some commentators believe that "social scientists should not be directly embedded with military units in theater" and should assist the military at a distance by providing predeployment training.44 The main reason for keeping social scientists out of theater is that their involvement would "only further alienate most social science academics from the military"⁴⁵ and "provide antimilitary elements within their own community any substantial ammunition with which to undermine the military-academic relationship."46 Denying the opportunity for civilian service to academics who are willing to contribute directly to national security only hurts military efforts downrange. Civilian members of HTTs (or Counterinsurgency Advisory and Assistance Teams, or any other entity that uses scholarly labor in a military context) contribute something valuable to the commander and staff of deployed units-namely, a unique nonmilitary perspective derived from years of education and research. Civilian social scientists who work for the military but are not in the military bring a level of objectivity and an out-of-the-box perspective that promotes increased understanding of the civilian population and helps identify more effective courses of action. Because civilian members of an HTT are not beholden to the performance pressures created by the need to obtain a favorable Officer Evaluation Report rating, they can articulate views not necessarily in conjunction with the dominant perspective. Keeping civilian social scientists out of theater will not alleviate the antipathy between academia and the military and will reduce the number of civilian social scientists with relevant experience and knowledge. Everyone would lose if ivory towers became inaccessible fortresses.

Phase Zero

When discussing the performance of the teams with supported units downrange, we frequently heard the question, "Where were you 5 years ago?" As the assistant chief of staff for operations, II Marine Expeditionary Force (Forward), Multi-National Force-West, observed, "We would have gotten where we are now sooner if we'd had knowledge of infrastructure-what does paramount sheikh really mean? When they say they're unemployed, what does that mean? If we'd had that back then, we could have done the COIN fight not better, but quicker."47 From platoon leaders to corps commanders, the general consensus was that sociocultural information would have been helpful before the war began. This observation caused us to wonder whether the war in Iraq would have been less lethal, better executed, or even unnecessary if this information had been available to and utilized by decisionmakers during Phase Zero.

In planning a campaign, the military divides the time sequence into six phases: shape, deter, seize initiative, dominate, stabilize, and enable civil authority.⁴⁸ Phase Zero, the shaping phase of the campaign, involves activities "to assure success by shaping perceptions and influencing the behavior of both adversaries and allies, developing allied and friendly military capabilities for self-defense and coalition operations, improving information exchange and intelligence sharing, and providing U.S. forces with peacetime and contingency access."⁴⁹

In simple terms, Phase Zero refers to the prevention of conflict. According to General Charles Wald, deputy commander of U.S.

European Command, "Phase Zero encompasses . . . everything that can be done to prevent conflicts from developing in the first place." The "ultimate goal" is to build capacity in partner nations that enables them to "prevent or limit conflicts."⁵⁰ This focus on "prevention rather than reaction," in the words of Theresa Whelan, Deputy Assistant Secretary of Defense for Africa, is central to the mission of U.S. Africa Command.⁵¹

In the standard military campaign model, the Y-axis represents a time sequence, while the X-axis represent the level of military effort. The X-axis also represents a cost curve, whether that cost is financial, national resources, or lives lost. Avoiding the cost curve is desirable from both a moral and financial standpoint. In the words of then Secretary of Defense Robert Gates:

How do you identify a problem early and put in the resources—whether it's train and equip or other partnership initiatives—so that American men and women in uniform don't have to go fight, so that we build indigenous capabilities that provide for stability operations rather than having to go in and do it ourselves in ungoverned spaces in countries that are under stress?⁵²

An ounce of prevention is worth a pound of cure. For example, the intervention in Liberia in 2003 cost "over \$680 million, mostly for [United Nations] peacekeeping and emergency assistance. Prior to that, the United States had committed a mere \$67 million to programs to promote stability in the troubled nation. Doubling or even tripling spending on our preventive programs would still have been far cheaper than the cost of reacting to the crisis and the violence that eventually unfolded."⁵³ If sociocultural knowledge benefits commanders and their staffs during tactical operations, it might also benefit the combatant commands conducting Phase Zero activities, such as building partnership capacity, influencing neutrals and potential adversaries, and alleviating underlying causes of conflict. As noted in Joint Publication 3–0, *Joint Operations*:

The social, economic, and political environments in which security cooperation activities are conducted requires a great degree of cultural understanding. Military support and operations that are intended to support a friendly [host nation] require a firm understanding of [that nation's] cultural and political realities. History has shown that cultural awareness cannot be sufficiently developed after a crisis emerges, and must be a continuous, proactive element of theater intelligence and engagement strategies.⁵⁴

if sociocultural knowledge benefits commanders during tactical operations, it might also benefit the combatant commands conducting Phase Zero activities

In 2004, the Defense Science Board (DSB) asked combatant commands to evaluate their preparedness for stability operations. According to the DSB, "almost across the board, combatant commanders felt they needed more knowledge for every country in their area of responsibility in order to be most effective in peacetime and during stabilization and reconstruction."⁵⁵ Suspecting that there was probably still a gap in this domain, we reached out to U.S. Pacific Command, Special Operations Command–Pacific, and Combined

Joint Task Force-Horn of Africa in 2008. Although senior staff confirmed the need for more sociocultural knowledge in their respective organizations, the bureaucracies were so byzantine that the timescale for working solutions was geological. Money that was programmed by the Pentagon years earlier to improve the combatant commands' sociocultural knowledge eventually went toward hiring more analysts rather than conducting systematic, empirical social science research. It is worth repeating an observation from Flynn, Pottinger, and Batchelor: "analysts . . . are starved for information from the field, so starved, in fact, that many say their jobs feel more like fortune telling than serious detective work."56 Creating more analysts but failing to provide actual information from the field is unlikely to produce different results even if a crystal ball were included.

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Mitigating Army Unit Rotation Policy

In both Afghanistan and Iraq, the Army employs a policy of unit rotation, which means deploying an entire unit (brigade, division, corps) to a theater, keeping it in place (generally for 12 months), rotating the unit home, and simultaneously replacing it with another unit. Individual rotation, on the other hand, "maintains the same unit in theater over time but moves individual soldiers into and out of the unit."⁵⁷

The current unit rotation policy limits the Army's ability to conduct COIN and stability operations. As one Special Forces Soldier noted, "'rotational warfare,' as it is often called, is one of the single greatest obstacles to the

long-term success of [COIN] in our respective theaters."58 First, the unit rotation policy creates a narrow window when units can focus on their mission. A unit requires 3 months at the beginning of a tour to get organized and emplaced, and 3 months at the end of the tour to prepare to redeploy. This leaves the unit 6 to 8 months to focus on its mission. Second, the short duration of the tour prevents units from developing expertise about local population. As one unit leaves, a new unit must start from the beginning. The "left seat/right seat ride" (in which a unit passes information and personal contacts with the population to another unit) is often hindered by time and manpower constraints. As Brian Jenkins has noted, "America's unit rotation policy impedes the accumulation of local knowledge and breaks the personal relationships that are essential to a successful counterinsurgency campaign."59 Third, disrupting the interpersonal relationships between soldiers and community members established during a yearlong deployment has a significant deleterious effect on trust, credibility, and even such mundane matters as contracting.

Recognizing the effects of unit rotation policies (and our inability to change Army policy), we organized and deployed HTS teams in such a way that they were permanently geographically located. After a new team deployed, it was filled as needed with individual replacements, staggered over time, as the old team members rotated out. In theory, this enabled the team to become the knowledge base for the unit and to provide continuity with the local population. New units that rotated into theater found an HTT already in place, prepared with information about the local economy, political system, and key leaders. As the S3 chief of plans for 56th Stryker Brigade noted in 2008: "The HTT provided continuity that we wouldn't have had otherwise.... Having an HTT,

you can walk across the street and talk to an experienced team who knows what was going on with sheik so-and-so 6 or 7 months ago."⁶⁰

In mitigating some of the unintended consequences of the Army unit rotation policy, we assumed the difficulties of an individual replacement system. These difficulties included integrating individuals into teams already on the ground, separation of individuals who worked well together in training and wanted to stay together downrange, difficulty integrating existing teams with newly arrived units, and a variety of similar issues. We considered options to mitigate the effects of individual rotation of team members, including pairing social scientists and team leaders or changing the duration of tours. However, managing the HTS team replacement system, which involved creating new teams from scratch (through a process of training, evaluation and assignment with associated attrition) and backfilling existing teams, was complex and did not lend itself to any easy solution. Ironically, the problem we sought to address on a microlevel within HTS was recapitulated with no obvious solution.

Conclusions

While looking for a motto for the program in 2006, one of us (Montgomery) proposed and the other (Steve) rejected "Changing the Army, One Brigade at a Time." In retrospect, the motto was not inaccurate; our goal was to improve a small but critical part of how military units conduct their mission. We wanted to provide military units with operationally relevant sociocultural information so decisions and actions would be better informed, more compassionate, and less kinetic. Based on feedback from the units HTS supported—as impressionistic and subjective as that may be—the teams downrange were beneficial to the Army and Marine Corps.

Whether HTS or any program with similar goals could be effective on a strategic level remains to be seen. Even if the requisite sociocultural knowledge were readily available, easily retrieved, and presented in a user-friendly format, would combatant commanders or policymakers actually use it to craft strategy and execute plans? Would detailed, empirical knowledge of the tribal structure in Iraq or the political objectives of Ho Chi Minh during the Vietnam War have enabled us to better shape the environment or deter conflict? Critics of the Bush administration believe that the Iraq War was the product of a neoconservative political agenda that rejected nuanced approaches in favor of military unilateralism. In that type of policy environment, a tree falling in a forest does not make any sound.

Whether the military itself can change and institutionalize the thinking that brought HTS into being remains to be seen. On April 14, 2008, Secretary Gates gave a speech in which he observed that the "Human Terrain program . . . is leading to alternative thinking-coming up with job-training programs for widows, or inviting local power-brokers to bless a mosque restored with coalition funds. These kinds of actions are the key to long-term success, but they are not always intuitive in a military establishment that has long put a premium on firepower and technology."61 Despite the recent experience with counterinsurgency in Iraq and Afghanistan, most of the military establishment continues to operate on the assumption that firepower and technology are the sine qua non of the military machine. Programs such as HTS are unusual and experimental, but this also makes them vulnerable to the plate tectonics of the Pentagon.

Only time will tell whether HTS endures, whether the U.S. military adapts, and whether it is judged as a success or failure. We enjoyed doing our part. **PRISM**

Notes

¹ The Human Terrain System (HTS) mission statement is available at <http://humanterrainsystem.army.mil/ Default.aspx>. It was developed through a series of workshops and approved by the Program Manager in 2008. It follows guidance from Field Manual 5–0, *Army Planning and Orders Production* (Washington, DC: Headquarters Department of the Army, January 2005), and uses a variety of materials to include the HTS concept of operations, HTS concept plan, Joint Urgent Operational Needs Statement, and HTS annual report 2007–2008.

² Interview, 2008; notes in possession of authors.

³ Ben Connable, "All Our Eggs in a Broken Basket," Military Review (March-April 2009).

⁴ American Anthropological Association (AAA) Executive Board, Statement on the Human Terrain System Project, October 31, 2007, available at <www.aaanet.org/about/Policies/statements/Human-Terrain-System-Statement.cfm>.

⁵ David Rohde, "Army Enlists Anthropology in War Zones," *The New York Times*, October 5, 2007, available at <www.nytimes.com/2007/10/05/world/asia/05afghan.html>.

⁶ When the authors use the term *we* in this article, it refers to the team of people who built HTS or to the HTS staff in general.

⁷ When General Eric Shinseki, Chief of Staff of the Army, testified before the Senate Armed Services Committee in 2003 that several hundred thousand troops would be needed in postwar Iraq, Paul Wolfowitz dismissed his views and asserted that many fewer troops would be needed, given that there was no ethnic strife in Iraq as there was in Bosnia or Kosovo. See Eric Schmitt, "Pentagon Contradicts General on Iraq Occupation Force's Size," *The New York Times*, February 28, 2003.

⁸ Interview with General David Petraeus, 2006; notes in possession of authors.

⁹ Richard D. Welch, Building Cultural Bridges: A Year in Iraq with the First Cavalry Division (Carlisle Barracks, PA: U.S. Army War College, 2006).

¹⁰ Interview, 2006.

¹¹ Ibid.

¹² Joint IED Task Force, Cultural Preparation of the Environment Pilot Information Sheet, July 19, 2005.

¹³ Some of us working on the CPE were concerned that a database system would not fully address the gaps being expressed by the military in Iraq. Thus, in March 2005, Montgomery and one of her colleagues produced a paper outlining a concept for an organization that would deploy teams, conduct social science research, provide reachback, run the CPE database, provide training, and so forth. *Military Review* eventually published the paper. See Montgomery McFate and Andrea Jackson, "An Organizational Solution to DOD's Cultural Knowledge Needs," *Military Review* (July–August 2005), 18–21.

¹⁴ Army Regulation 71–9, December 28, 2009, 6-1(a), 25, available at <http://armypubs.army.mil/epubs/pdf/R71_9.PDF>.

¹⁵ Resourcing was approved in 50 percent increments but contingent on individual unit requests, which came quickly from 82^d Airborne Division, II Marine Expeditionary Force, and III Army Corps.

¹⁶ Following a presentation to the Joint Rapid Acquisition Cell in late April 2007, \$66 million was approved for fiscal year 2007 and \$122 million for fiscal year 2008.

¹⁷ Interview with Colonel Marty Schweitzer, 2007; notes in possession of authors.

¹⁸ Because it handles secure compartmentalized information relating to potential targets, military intelligence is sequestered from the rest of the staff. The intelligence generated concerns the location, identity,

capabilities, and intent of people, places, and things, which can be targeted using lethal force. As a result, almost everything produced by intelligence offices is classified and not available to most staff members.

¹⁹ Interview, 2006.

²⁰ During the 4 years that we were involved with HTS, no HTT was assigned to the intelligence office. As noted above, the vast majority of teams were located with the Effects Cell. However, when the HTT team leader has a rank above 05, the HTT tends to acquire the status of special staff (such as the Judge Advocate General or the chaplain) with a direct line of communication to the brigade commander. In Iraq in 2009, 40 percent of the teams were assigned as special staff working directly for the commander, or through the deputy commander or executive officer. This arrangement enhances team ability to influence and contribute to brigade planning and operations. It may also, however, limit the ability of the team to integrate fully with the rest of the brigade staff.

²¹ Joint Publication 2–0, *Joint Intelligence* (Washington, DC: The Joint Staff, 2006), I-26.

²² Michael T. Flynn, Matt Pottinger, and Paul D. Batchelor, *Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan* (Washington, DC: Center for New American Security, 2010), 3, available at <www. cnas.org/files/documents/publications/AfghanIntel_Flynn_Jan2010_code507_voices.pdf>.

²³ Ibid., 7.

²⁴ Ibid., 8.

²⁵ Interview, 2009; notes in possession of authors.

²⁶ Ibid.

²⁷ Interview, 2010; notes in possession of authors.

²⁸ AAA Commission on the Engagement of Anthropology with the U.S. Security and Intelligence Communities, *Final Report on the Army's Human Terrain System Proof of Concept Program*, submitted to the AAA Executive Board, October 14, 2009, 18.

²⁹ Ibid., 3.

³⁰ Interview, 2009.

³¹ Interview, 2008.

³² Broadening the aperture of the Intelligence Community, and the HTS project in particular, was championed by Lieutenant General John F. Kimmons, who was the Army G2 at the time and became Director of the Intelligence Staff for the Office of the Director of National Intelligence on February 28, 2009.

³³ Kimberly Dozier, "Intelligence Shift Shows Change in Afghan War Aims," Associated Press, June 27, 2011.

³⁴ Office of the Under Secretary of Defense for Acquisition, Technology and Logistics, Report of the Defense Science Board Task Force on Defense Intelligence: Counterinsurgency Intelligence, Surveillance, and Reconnaissance Operations, Washington, DC, February 2011, 61.

³⁵ The majority of DOD sociocultural programs fall within the Human Social Culture Behavior Modeling Program (HSCB), executed by the Office of Naval Research. See HSCB Newsletter, Spring 2011, 9.

³⁶ Interview, 2010.

³⁷ Interview, 2008; notes in possession of authors.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Interview, 2009.

⁴² Flynn, Pottinger, and Batchelor, 9.

⁴³ Thomas A. Marks, "Evaluating Insurgent/Counterinsurgent Performance," *Small Wars and Insurgencies* 11, no. 3 (Winter 2000), 21–46.

⁴⁴ Scott Atran, "Pathways to and from Violent Extremism: The Case for Science-Based Field Research," Statement Before the Senate Armed Services Subcommittee on Emerging Threats and Capabilities, March 10, 2010.

⁴⁵ Ibid.

⁴⁶ Connable.

⁴⁷ Interview, 2008.

⁴⁸ Joint Publication (JP) 3–0, *Joint Operations* (Washington, DC: The Joint Staff, September 17, 2006, incorporating Change 1, February 13, 2008), IV-27–IV-30.

⁴⁹ Ibid., IV-27–IV-28.

⁵⁰ Charles F. Wald, "New Thinking at USEUCOM: The Phase Zero Campaign," *Joint Force Quarterly* 43 (4th Quarter, 2006), 72–75.

⁵¹ Theresa Whelan, "Why AFRICOM? An American Perspective," Situation Report, Institute for Security Studies, August 17, 2007, available at <www.isn.ethz.ch/isn/DigitalLibrary/Publications/Detail/?ord538=grp1 &ots591=eb06339b-2726-928e-0216-1b3f15392dd8&lng=en&id=99985>.

⁵² John J. Kruzel, "Stability Operations Require More U.S. Focus, Gates Says," American Forces Press Service, April 14, 2009.

⁵³ Wald, 73.

⁵⁴ JP 3–0, VII-10.

⁵⁵ Defense Science Board (DSB), *Transition to and from Hostilities* (Washington, DC: DSB, December 2004), 114.

⁵⁶ Flynn, Pottinger, and Batchelor, 9.

⁵⁷ Douglas Holtz-Eakin, "The Ability of the U.S. Military to Sustain an Occupation in Iraq," Statement before the Committee on Armed Services, U.S. House of Representatives, November 5, 2003, 10. The Army's unit rotation policy resulted from the experience of individual rotation during the Vietnam War. As Charlie Moskos once noted, "The rapid turnover of personnel hindered the development of primary-group ties . . . [and] reinforced an individualistic perspective." See Charles C Moskos, Jr., "The American Combat Soldier in Vietnam," *Journal of Social Issues* 31, no. 4 (1975), 31.

⁵⁸ William S. Sobat, "Relief in Place: Managing the Transition of Authority," *Special Warfare* (January–February 2009), 29.

⁵⁹ Brian Michael Jenkins, "Safer, But Not Safe," San Diego Union-Tribune, September 10, 2006, available at <www.rand.org/commentary/2006/09/10/SDUT.html>.

60 Interview, 2008.

⁶¹ Robert M. Gates, Speech to the Association of American Universities, April 14, 2008, available at <www.defense.gov/speeches/speech.aspx?speechid=1228>.