# **HUMAN-SYSTEMS INTEGRATION**

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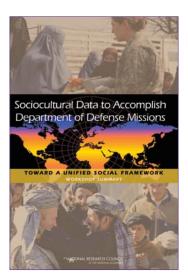
#### **WORKSHOP HIGHLIGHTS**

FEBRUARY 2011

# SOCIOCULTURAL DATA TO ACCOMPLISH DEPARTMENT OF DEFENSE MISSIONS: TOWARD A UNIFIED SOCIAL FRAMEWORK

### **Workshop Summary**

On August 16-17, 2010, the Board on Human-Systems Integration of the National Research Council held a workshop in Washington, DC, on Unifying Social Frameworks: Sociocultural Data to Accomplish Department of Defense Missions. Presenters and discussants addressed the variables and complex interaction of social and cultural factors that influence human behavior, focusing on potential applications to the full spectrum of military operations. The workshop's keynote address by Major General Michael T. Flynn, U.S. Army, provided critical context about the cultural situation and needs of the military operating in Afghanistan. The address, "Making a Difference in Afghanistan: Technology, Knowledge, and Intelligence in a Dynamic Sociocultural Environment," was a candid discussion of his experiences, lessons learned, and current and future initiatives for mission success. The



goal of the workshop was not to provide specific recommendations but to offer insights and possible directions for the Department of Defense to consider, particularly about sociocultural data and models that might be useful for accomplishing military missions.

#### RELEVANT SOCIOCULTURAL DATA

One of the themes that emerged from the workshop was the value of analyzing large collections of sociocultural data in order to identify the groups and individuals most likely to pose risks in a particular setting. For example, Hsinchun Chen of the University of Arizona described his Dark Web project, which analyzes information from the Internet—forums, chat rooms, video postings, and the like—in order to identify potential terrorists and to map their web of connections. Linguistic software makes it possible to sift through millions of messages, looking for ones from individuals most likely to commit terrorist acts.

In a similar vein, David Kennedy of the John Jay College of Criminal Justice provided details about a program that has sharply curtailed the homicide rate in several large U.S. cities. Detailed crime data are combined with local knowledge from police officers and community leaders to identify core offenders and the groups most likely to be involved in violence, and these individuals and groups are then targeted with intensive interventions designed to change their behavior.

Both speakers emphasized the importance of data—as much information as possible, from a variety of sources, and in multiple forms—to understanding a situation and determining which groups to focus on in order to be effective in accomplishing well-defined missions. They also highlighted the value of using various tools and theoretical approaches from the behavioral and social sciences to analyze and gain insights from those data.

Instead of applying overarching principles or a unified theory to a problem, both presenters suggested a more practical approach to grappling with sociocultural issues: emphasizing on-the-ground observations and insights from front-line sources.

#### THE APPLICATION OF CULTURAL MODELS

Missions in such places as Iraq and Afghanistan require the U.S. military to put increasing emphasis on achieving its goals without applying force; many military missions and strategic objectives now require cooperation and collaboration with international partners and local populations. A number of speakers described cultural models that could help the military improve its handling of these new sorts of missions.

One subject that received a great deal of attention at the workshop was the differences between Western culture and other cultures — particularly of countries in the Middle East and Asia — that members of the U.S. military need to be familiar with and take into account when dealing with people from other parts of the world. Jeffrey Sanchez-Burks of the University of Michigan explained, for example, that Americans tend to pay much less attention to interpersonal relationships in the workplace than do people from most other cultures: they instead focus mainly on the task at hand. Shinobu Kitayama, also at the University of Michigan, said that Americans tend to think of people as independent entities, motivated by their own values and desires, whereas people from other cultures, particularly Asians, are more likely to see individuals as part of the larger society, influenced by those around them. Jeanne Brett of Northwestern University pointed out that Americans tend to handle confrontations directly, saying exactly what they mean to another person, even when it may be unpleasant, whereas those in Asian countries are generally indirect and may be offended by an American's directness. Brett speculated that dealing with confrontations indirectly may also be a more effective approach for interacting with those from Middle Eastern countries.

Additionally, several speakers emphasized the importance of stories, narratives that engage people both cognitively and emotionally, when dealing with social, political, and psychological issues. James Dillard of Pennsylvania State University argued that stories have a tremendous power to persuade indirectly by setting forth a particular way of

thinking about a situation. He emphasized that it is as important for people to understand the stories of their enemies and how they see themselves, as it is to engage local populations in stories that accurately impart values to create shared identities between Americans and those they are trying to help.

#### TOWARD A MORE UNIFIED APPROACH

Throughout the workshop, presenters touched on the issue of developing a unified social framework that the military could use for dealing with sociocultural issues. Several argued that it would probably not be possible to develop general predictive models based on a few basic principles to provide insights about specific situations. Although models will probably never be good at making exact predictions of what will happen at the tactical level, they can be expected to provide information on the probabilities of various things happening at the strategic or operational level. The workshop participants seemed to have at least one position in common: using sociocultural data and models to understand the environment and define the "probability space" of future events may have valuable utility to assist commanders in making better informed decisions.

For More Information . . . This brief was prepared by the Board on Human-Systems Integration (BOHSI) based on the workshop summary Sociocultural Data to Accomplish Department of Defense Missions: Toward A Unified Social Framework (National Research Council, 2011). The workshop was sponsored by the Office of Naval Research. The responsibility for the published workshop summary rests with the workshop rapporteur and the institution. Copies of the workshop summary are available from the National Academies Press, 500 Fifth Street, NW, Washington, DC 20001; (800) 624-6242; http://www.nap.edu or via the BOHSI web page at http://www.nationalacademies.org/bohsi. Permission is granted to reproduce this document in its entirety, with no additions or alteration.

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