

7

Expert Cultural Sensemaking in the Management of Middle Eastern Crowds

Winston R. Sieck, Jennifer L. Smith, and Anna Grome
Applied Research Associates, Inc.

David A. Rababy
Rababy & Associates, Inc.

In June 2003, a team of U.S. soldiers, Kuwaiti police, and an Iraqi guide were investigating mass grave sites to search for Kuwaiti missing persons. The team learned of a Ramadi cemetery that likely contained some missing persons, and they went to investigate. The U.S. soldiers waited outside the Muslim cemetery with the vehicles, while the others entered to investigate. Local kids began to gather near the vehicles, and then more people stopped as they walked by. As more adults approached, the kids melted to the background. Approximately 30 to 40 people gathered within 15 minutes, and the team was hemmed in. At this point, an older, grizzled man made his way to the front of the crowd and greeted the team leader. The other members of the crowd deferred to him when he talked. The grizzled man asked the team leader if there were Kuwaitis in the cemetery and why they were there. The team leader answered the questions calmly, and the grizzled man then began to loudly describe many bad things that Kuwaitis were responsible for. More people joined the crowd.

In order to successfully deal with crowds in host nations, American personnel must be able to understand the situation from the perspective of the crowd members. This claim is based on the assumption that crowd reactions depend in large part on how the relevant players (i.e., crowd members and security forces) interpret the situation. Past research in naturalistic decision making highlights the importance of mental models for how people make sense of situations (Klein, 1998; Klein, Phillips, Rall, & Peluso, 2004). According to Rouse and Morris (1986), mental models are “mechanisms whereby humans are able to generate descriptions of system purpose and form, explanations of system functioning and observed system states, and predictions of future system states” (p. 351). People’s mental models describe how they understand physical things like mechanical devices, but also their understanding of social and cognitive phenomena, such as crowd behavior, that tend to differ across cultures (Gopnik & Wellman, 1994; Lillard, 1998; Sieck, Rasmussen, & Smart, 2009a).

In the past, crowd theorists popularized notions that minimized the importance of interpretations in crowd situations. Particularly, suggestions that crowd membership drives people toward irrationality and destructiveness do not leave much room

for mental models, at least on the side of crowd members (Le Bon, 1947). However, more recent theories have been developed that do take into account the role of mental models in crowd situations. One such theory is the social identity model (Drury & Reicher, 1999). The social identity model emphasizes the self-concepts of crowd members, and explains how conceptions of the self and related outcomes, such as feelings of power, change through participation in crowd events. According to the model, social identity is a mental model of one's position in a set of social relations along with actions that are possible and legitimate given such a position. Social identity thus drives decisions in crowd situations. Conflicts can arise when the various groups within a crowd, such as security forces and crowd participants, have distinct models of the crowd members' social identity (i.e., roles within the event, and society more generally) that guide their interpretation of the situation (Drury & Reicher, 2000). With its emphasis on mental models, the social identity model enables an important link between analyses of crowd situations and the cultural analysis that is required to understand interactions between Middle Eastern crowd members and American personnel who find themselves in positions of needing to manage those crowds.

One important issue that the social identity model of crowd behavior has not yet addressed concerns the differences in the mental models of crowd functioning that U.S. security forces and crowd members from Middle Eastern cultures most likely have due to their distinct cultural backgrounds. That is, Americans who are expected to manage Middle Eastern crowds must also be adept at cultural sensemaking (Osland & Bird, 2000; Sieck, Smith, & Rasmussen, 2008). Cultural sensemaking refers to the processes by which people come to understand and explain the behavior of others with distinct cultural backgrounds. A major research issue is to determine what cultural aspects are most important and helpful for making sense of behavior in a context such as crowd events.

Before addressing culture in protests or other crowd situations, we first need to define *culture*. As expected in any highly interdisciplinary field, there exist a variety of conceptions of culture (Atran, Medin, & Ross, 2005). Our conception is distinctly cognitive in nature, following an epidemiological perspective (D'Andrade, 1981; Sperber, 1985). As such, a fundamental assumption about culture is that members of geographically proximal groups share experiences growing up in similar, but not identical, ecological and social contexts. These shared developmental experiences lead to significant commonalities in individuals' mental models, and other representations. Such distributions of representations, in turn, ground the distribution of behavioral norms, expectations, interpretations, and affective reactions in a population (Sperber & Hirschfeld, 1999).

An important property of these mental representations is that they are highly specific to particular domains (Hirschfeld & Gelman, 1994). That is, social activities, such as participation in protests or providing security during protests, are supported by mental models that are tailored to those specific activities. Hence, the culturally shared mental models comprise values, beliefs, and concepts that are salient to members of a particular culture in those contexts, and may well not generalize to other situations. Multiple cultural values are reflected in peoples' mental models, and certain values may be more important than others, depending upon the situation, a phenomenon sometimes known as value trumping (Osland & Bird, 2000). For example,

Americans typically place a high value on freedom of speech; however, they may also support censorship or restricted access to information at certain times (e.g., extremely violent or sexually explicit content).

The upshot is that it is difficult to understand the cultural considerations that are relevant within a particular context, such as crowd management in the Middle East, by starting with preexisting lists of domain-general cultural values (Hofstede, 2001; Schwartz, 1994). In the present study, we take a different approach. Here, we investigate the experiences and mental models of Middle Eastern cultural and military experts who have direct experience in managing Middle Eastern crowds. Our aim was to uncover their cultural expertise, with a special focus on the mental models they used to make sense of the behavior of others in crowd situations. By capturing and modeling the expert cultural knowledge specific to crowd situations, we were then able to identify particular dimensions of cultural variation that are relevant in this context. This knowledge also formed the basis for a cultural education package situated in crowd contexts, and other recommendations for the improvement of cultural sensemaking in crowd situations.

Method

Participants

We interviewed 12 experienced military personnel in the United States and Lebanon. We conducted interviews with Lebanese commandos in Beirut who had a native cultural perspective on the Middle East, and had personally provided security at crowd demonstrations in Lebanon. We also interviewed U.S. military personnel (e.g., foreign area officers, civil affairs, and human intelligence officers) who had advanced cultural knowledge of the Middle East, typically including Arab language fluency, as well as specific crowd management experiences in Iraq. All of the interviewees were men. Though most of the Lebanese participants spoke English, a translator was needed and available during those interviews. The experts were strictly volunteers, and did not receive compensation for their time because of their military status.

Interview Guide

The critical decision method (CDM) was used as the basis for the interviews used in this study. The CDM is an incident-based interview method for uncovering information about the knowledge, goal structures, cues, and judgment and decision processes underlying observable actions in a particular context (Hoffman, Crandall, & Shadbolt, 1998; Klein, Calderwood, & MacGregor, 1989). The CDM was originally developed based on an earlier technique for uncovering critical incidents that come from direct experience (Flanagan, 1954). Sieck, McHugh, and Smith (2006) provide more detail on the use of the interview technique for examining cultural issues, including a comparison between CDM and more traditional ethnographic methods.

The CDM interviews used a case-based approach, and were organized around an initial, unstructured account of a specific incident. Once the participant identified a relevant incident, he was asked to recount the episode in its entirety without interruption

from the interviewer. The expert's account of the incident provided the basic structure for the remainder of the interview. The interviewers then conducted additional sweeps through the incident to elicit further details. Examples of questions included:

- What cues alerted you to changes in the crowd?
- How did you recognize when the crowd was changing in some way?
- What were your concerns at that point?
- What was it about the situation that let you know what was going on?
- Can you describe what the crowd was like at the beginning, at the middle, and then again at the end of the gathering? How was it different at these different points?
- What if you had taken action X? How would things have turned out differently?

Interview Procedure

Interviews were conducted by a pair of trained interviewers with one expert at a time. In a given session, one interviewer led the questioning and took notes on key points, while the other interviewer focused on taking extensive notes. Occasionally, the lead interviewer would pause and ask the second whether he or she had any questions for the expert. The military participants declined permission to audio record the sessions, so notes were relied upon as the data record. As soon as possible after each session, the second interviewer would type up the main body of notes. The first interviewer would then review the notes against his or her records, and use track changes to fill in any gaps or highlight inconsistencies. The interviewers would then discuss and settle the differences by consensus. No major disagreements were encountered; in that event, the interviewers would have consulted the expert. An Arabic translator was available during all of the interviews with Middle Easterners, and the translator joined the interview to facilitate communication between the interviewer and interviewees as necessary. The duration of each interview was approximately 1.5 to 2 hours.

Analysis

A decision requirements analysis was conducted in order to understand the critical cognitive and cultural elements pertinent to crowd management. The first step was to code each incident for decisions, critical cues, factors, challenges, strategies, novice errors, goals, and cultural considerations mentioned in each incident. Two raters coded the data independently, and then met to compare their coding, to ensure that they fully captured the decision requirements for each incident. Disagreements were resolved through discussion. Tables of the decision requirements were created as an intermediate step. Finally, an expert model of Middle Eastern crowds was developed that highlighted the key considerations present across incidents. The model is reported in the next section, along with supporting segments from incidents.

Results

Consistent with past research on expertise, we found that the experts in the current study held elaborate mental models of dynamic crowd situations that consist

of a set of various kinds of concrete and abstract concepts, bound together with intricate causal relationships. Past research on expert-novice differences has shown that experts' knowledge representations are richer conceptually, possessing more abstract concepts and higher-order relationships between concepts, and being more organized than novices' (Chi, Feltovich, & Glaser, 1981; Larkin, McDermott, Simon, & Simon, 1980). In addition, the expanded knowledge bases of experts have also been found to enhance aspects of perception and cognition, such as judging typicality, noticing cues that novices miss, and visualizing antecedents and consequences of actions and events (Christensen-Szalanski & Bushyhead, 1981; Klein & Hoffman, 1993). Klein and Hoffman (1993) argued that experts could be identified based on the way they see relationships between concepts, especially causal relationships. One useful way of graphically representing expert knowledge relevant to key judgments and decisions in a particular domain is the influence diagram (Howard, 1989). Influence diagrams are especially useful for depicting sets of complex causal relationships that enable experts to see how a situation developed into its current state, as well as how it is likely to progress.

Figure 7.1 illustrates a consensus of the experts' mental models in the current study, as extracted from the interview data. We have represented the expert mental model in the form of an influence diagram (Bostrom, Fischhoff, & Morgan, 1992). The circles represent basic concept nodes of variables the experts kept in mind, the arrows illustrate experts' beliefs about causality, and the final concept nodes under "social effects" show the end-state values that they attempted to influence (i.e., decrease immediate threat and increase positive civilian attitudes). The expert mental model guides the types of information that security forces attend to when they make sense

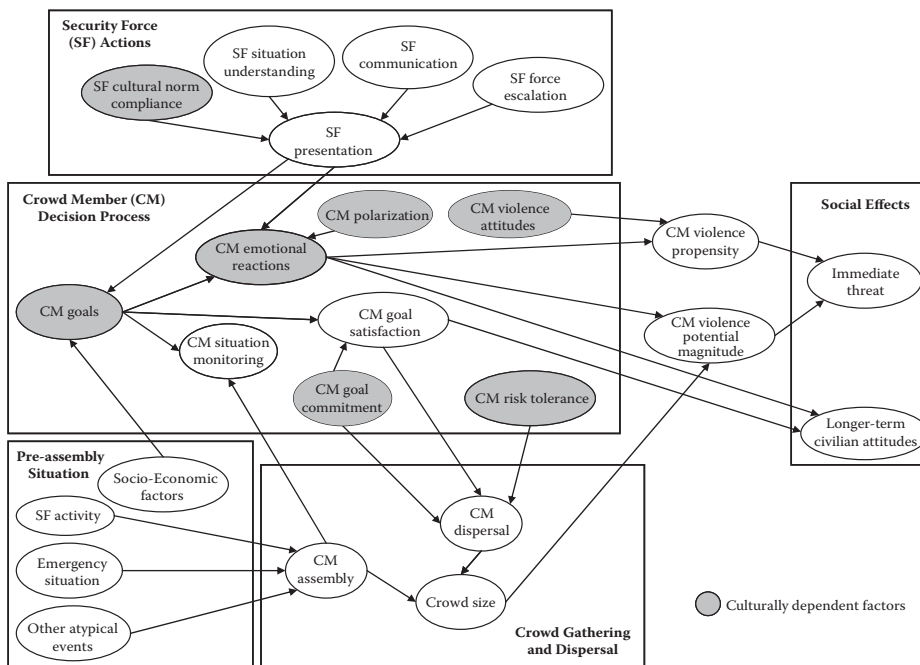


FIGURE 7.1 Expert mental model of crowd dynamics in the Middle East.

of crowd situations and assess the causal relationships between factors. As shown in Figure 7.1, experts considered the following variables: the preassembly situational factors, crowd gathering and dispersal processes, crowd member decision-making processes, security force presentation and actions, and resulting social effects. The preassembly situation referred to relevant contextual factors, including the event that caused people to begin to gather in a crowd (e.g., a fire, presence of security forces, etc.). Crowd member decision-making processes were believed to be influenced by background contextual factors, and to vary culturally in several ways. Security force actions, such as displays of force, wearing helmet and body armor, and acting according to cultural norms, were also believed to influence aspects of the crowd member decisions. Finally, the experts considered the effects of the crowd management efforts on longer-term civilian attitudes, in addition to immediate threat level and rate of dispersal. We next provide specific incident results that corroborate and elaborate aspects of the model.

The findings suggest that the experts made several important judgments during crowd management; in particular, as shown in Figure 7.1, they informed and updated their baseline models with details of the situation at hand. Key assessment categories included:

- Goals and motivation of crowd members
- Crowd members' goal commitment and tolerance for risk
- Security force presentation with respect to cultural norms
- Crowd members' use of polarizing language
- Crowd members' emotional expressions

Goals and Motivation of Crowd Members

Goals, needs, and wants are all concepts that explain peoples' motivations for specific behavior. The experts from our interviews attempted to determine the goals and motivations of the crowd members in order to identify leverage points for influencing the crowd. They implicitly understood that crowd members would disperse once their goals were satisfied. For example, an Arab-American Marine officer was ordered to disperse what appeared to be an angry mob forming outside of the Palestine Hotel in Baghdad, in 2003, just after major combat operations had ceased:

The Marine officer climbed up onto a car inside the compound and looked at the crowd. He didn't have a flak jacket or helmet. He learned that keeping a helmet on kept the crowd more aloof, while not wearing it drew them in. He expected to be hit with stones or even bullets, but the crowd was just yelling. There were approximately 1,000 people, both men and women. It was noisy; he couldn't tell what was being said. He didn't see any guns. He spoke some Arabic, and it was like a light switch; everyone stopped yelling. Then, the people started screaming questions at the officer. He realized that the people weren't angry with the United States; they were just starved for information. He held a Q&A session and answered the questions one at a time. He could only talk to the people in front. He addressed questions from elders and the most vocal crowd members. Most of their questions focused on Saddam and missing family members.

For example, “Where is my family?” “When is the electricity coming on?” “Where is the food?” “Where’s Saddam?”

When he talked to the crowd, he switched to an Arab mindset. He didn’t know if his responses were true, but he said what he needed to in order to calm the crowd. He told them what they wanted to hear, for example, “Saddam released all of the prisoners. We’re looking for your family.” “Saddam turned off your electricity, but we’re trying to turn it back on. First we’re going to turn electricity on in your neighborhood (pointing) and then we’ll get electricity turned on in their neighborhood.” “You’ll have food when the roads to Jordan open up. We’re working on this.” “Saddam’s dead. We bombed his bunker over there.”

The reality was that the United States did not know where Saddam was at this point. The officer said he was dead because he knew the main fear of many Iraqis was that Saddam was hiding and would punish everyone once the United States left—like he did in 1994. Also, he never wanted to say “I don’t know” in the Middle East, because it brings shame upon you. It’s looked upon as a personal weakness. The crowd liked what they heard.

The more he talked, the calmer the crowd became. The crowd was the most quiet when he spoke, but it was never very quiet. As their appetite for information was satisfied, the people began to disperse.

In addition to assessing the crowd members’ goals and using that to influence them, the officer was also able to judge the level of threat by looking for arms and rock throwing. It also shows how the officer attended to his own presentation, both his physical stance (no helmet) and by answering questions in accord with Arab cultural norms.

Crowd Members’ Goal Commitment and Tolerance for Risk

In addition to the goals themselves, the experts we interviewed also assessed the level of commitment to those goals, including the extent to which crowd members would risk physical harm. They used the information to determine how strong a stance they could take in directing crowd members, while avoiding significant backlash. For example, extremely high risk tolerance and commitment in protestors was reported by a Lebanese Army officer who was appointed to a security detail during protests against Syria in 2005, following the assassination of Prime Minister Rafic Hariri:

The demonstrators included men, women, and children from all religious groups. The people were angry, and wanted to vent their anger in public. They were not dangerous—he did not see any sticks, arms, stone throwing, or anything. He had arranged his soldiers behind concertina wire, with an officer on a pile of stones with a bullhorn. The officer was in charge of talking to the crowd. His job was to calm them down, and repeat that they were not allowed to come in. The crowd reaction was shouting slogans, walking over the concertina wire, and pushing the soldiers. He saw women and children walking over two layers of concertina wire. He saw that as an indication of the strength of their determination. He felt that attempting to block them completely at that point would end in disaster, so he let a few enter the area, a little at a time.

As with the first incident, this one again shows the expert's ongoing assessment of threat level, in addition to reading cues regarding the behavior and appearance of crowd members in order to judge their commitment and tailor his crowd management strategy accordingly.

Security Force Presentation With Respect to Cultural Norms

As illustrated in the first incident, the experts were aware of their presentation to the crowd. They also took cues from crowd members, who were observing events, and determined whether people were playing by the rules of society or whether security forces or other crowd members were stepping out of the bounds set by cultural norms. Consider the following example described by a U.S. officer who was part of a team that had intercepted some bank robbers in Baghdad in 2003:

The Iraqis were standing there quietly watching the events; they seemed curious ... then some of the men began saying "Haram"—meaning "shame" or "it's too bad." This started spreading throughout the crowd. The crowd told the security force officer that he needed to go see the old man. He understood what the problem was as soon as he walked down the sidewalk to the old man. The bank robbers, cuffed and lying on the concrete sidewalk, were not comfortable. One of these men was in his late 50s or 60s—he was a gray hair. He was a little frail. The crowd could clearly see that he was in pain. The crowd began complaining about the way that the gray hair was being treated. The elder was in obvious discomfort. They told the security force officer that he should let the old man go. Crowd members started shouting, "Let him go." The crowd started to become more agitated and angrier. The officer treated the elder with respect, and decided to let him go. He helped the elder stand up, brushed off his clothes, and cut off the elder's flexicuffs. He then picked the elder's belongings up off the ground and put them back into his pocket. He walked the elder to the edge of the crowd and said, "You're free to go, Uncle." The elder was very grateful. He kissed the security force officer on his cheeks and shook hands with him. The crowd immediately applauded.

In this case, the officer recognized immediately that the emotional reaction from the crowd occurred because the U.S. treatment of the old man violated Middle Eastern norms regarding respect for the elderly. He used that understanding to turn the situation to his advantage; by freeing the old man, he was able to reverse the emotional reaction. After the crowd event, some people from the crowd pulled the officer aside and gave him information on some locations of weapon stores, suggesting that his actions fostered positive attitudes among the Iraqis who were present. In the next incident, a U.S. officer leveraged a cultural norm violation by the crowd members themselves as a way to manage the crowd:

The officer noticed an old woman being pushed into the concertina wire surrounding the base. The first thing he yelled at the large crowd was, "What's wrong with you? You're hurting mama!" The crowd stopped and listened to what he was saying. Starting at the back of the crowd, the crowd began to back up and give the woman some room.

The gray hairs are important. They command a lot of respect through age. No one in the crowd wanted to hurt the old woman.

Crowd Members' Use of Polarizing Language

Another common theme that emerged from the interviews was the attention experts paid to crowd members' use of exacerbating language to inflame emotions. In these Middle Eastern crowds, the security forces acted quickly, attempting to counter such language before it could cause strong emotional reactions. In some cases, instigators in the crowd used language to highlight in-group/out-group differences between the crowd members and security forces. Unfriendly crowd leaders attempted to engender hostile emotional reactions among their fellows by proposing images of opposite social identities between security forces and the crowds, as in the example below, which describes a situation during a Hezbollah-led demonstration in Beirut. The Lebanese security forces were able to counter polarizing efforts by emphasizing commonalities between themselves and the protesters, and by providing evidence to back up their claims:

The lead protestors would call out arguments that created a distance between themselves and the security forces. For example, the instigators argued that the protestors were Muslims, and the security forces were Christians. They also brought Israel into the picture, suggesting that the security forces were working on behalf of the Israelis. The security forces attempted to talk to the crowd in ways that would calm them down and find commonalities between them. They would say things like, "Calm down," "we are not the enemy," "we're just doing our jobs here—have to clear the area." They also had some Muslims in their ranks who stepped forward to directly counter the argument about religion. By pointing out the commonalities, they were able to defuse the situation.

In addition to attending to and countering polarizing language, this example provides yet another illustration of security force awareness and shaping of their presentation to the crowd—in this case with the purpose of defining common social identity with crowd members. In another portion of the bank robbery incident described above, the U.S. officer noticed a change in the language being used by some women in the crowd and recognized the need to engage them in dialogue:

The 50 or so people weren't expressing emotion—neither happy nor sad. The Iraqis were standing there quietly watching the events. The officer interpreted this as meaning that the crowd gathered because they were curious and wanted to see what was going on.

At first the people were just talking to each other, then they started to talk to the Marines. When the officer exited the building the second time the crowd was louder than they had been when he went back in the building. At this point he started noticing what they were saying. The loudest voices were coming from a group of women dressed in full abaya and niqab at the front of the crowd on the left. This was where the officer's attention was focused, because they were the most vocal. There were some children mixed in with the women. This subgroup kept getting closer and closer to the bank. The rest of the crowd appeared to support these women. The women and the rest

of the crowd started blaming Saddam for the robbery—Saddam made the people poor and they were only taking money because they didn't have any. It was all Saddam's fault. They were very sympathetic to the robbers. At this time, there was a lot of looting going on (e.g., the museum was robbed, banks were closed). This bank robbery was not unusual. This is the first time that the officer noticed what the crowd members were saying, and that they were becoming more vocal. At this point he wasn't feeling that the crowd was hostile, but he was thinking about the threat. The crowd was twice as large as it had been, and there are only three on his team. The officer decided to address the loudest in the crowd first—the group of women in the front. He told the crowd that the robbers were taking the crowd's money, not Saddam's money. The women/crowd quieted and thought about this. Then, they were less vocal, but they didn't stop talking. The women wanted to talk to the officer about his background and about how evil Saddam was. He stayed engaged in communication with them at this point, so as to form a bond with the crowd members.

Crowd Members' Emotional Expressions

The experts' reports consistently suggested that Middle Eastern crowd members tended to be very expressive, with extensive use of body language and gesticulation. As one U.S. officer described, "Arabs talked with their hands. The most vocal people exhibited the most body language, the most flailing of limbs." The Americans thus felt they needed to recalibrate their interpretation of emotional expressions so as not to overrespond to those cues. For example, one officer noted, "Arabs tend to speak more loudly than Americans, often causing Americans to think they are angry when in fact that is just how they speak." Another U.S. Marine described an incident that shows how crowd members sometimes managed their emotions:

A Sheik felt threatened by another village leader, and ordered his son to use the Mosque loudspeaker to tell his followers to come to his house. Hundreds did come, and then they became the problem. It was the officer's first night in the city, and he had just taken over the civil affairs lead. His team was in the police station, on the top floor. He hears the Mosque blaring something, but doesn't understand. A little while later, droves of people are walking with purpose down the road, past the police station, and converging on the Sheik's house. The team went to investigate, and when they rounded the corner to the Mosque, the officer's first reaction was, "Oh my God, this was stupid. What am I going to do?" He felt fear because of their numbers, and also because they seemed so angry. The crowd was in a frenzy, and actively working themselves up. They were jumping up and down, yelling, dancing around, chanting, and looking threatening. This was not directed toward the Marines; many probably didn't see them. The officer yelled (and his translator joined in) at the Sheik and son to get the people out of the street. The sheik did, and the people calmed down quickly. The officer was surprised at how fast the frenzied people calmed down and started home.

In this case, the Marine felt that his original assessment of threat was overly influenced by the level of emotional display, and that the Middle Eastern crowd members were not feeling the intense anger that he had perceived.

Discussion

Overall, the analysis revealed that experts have complex mental models of crowd dynamics that are sensitive to Middle Eastern cognition and decision making. As indicated in Figure 7.1, security force members must ultimately determine whether the crowd currently poses a threat, whether its members' attitudes can be improved at least minimally and the crowd dispersed, or whether the crowd is likely to become more hostile over time. This assessment can be particularly difficult for personnel who are new to the region and have little experience interacting with its inhabitants. Cues, such as the five kinds described above, that can be used to determine crowd members' intentions and level of threat are substantially culture specific. The theoretical and practical implications of these findings are discussed further in the following sections.

Theoretical Implications

The cultural perspective that we have adopted proposes that cultures cannot adequately be described in terms of a small set of domain-general values. Rather, the primary aspects of culture that are salient and significant to an interaction will be situation specific (Hirschfeld & Gelman, 1994). Hence, we started our research by characterizing the nature of the intercultural interactions between U.S. and Lebanese military personnel and Middle Eastern crowds. Incidents on crowd control were elicited from experienced U.S. and Lebanese military personnel and examined to determine the cultural aspects that are critical in these contexts. Our stance is that the a priori application of cultural dimensions is of little use if one seeks to predict which cultural norms or values will be critical to an accurate understanding of specific real-world situations. However, our position does not deny the usefulness of basic research examining particular aspects of cultural differences, once analysis of naturalistic situations has identified culturally relevant aspects. This approach is taken in the following section. We will consider domain-general cultural research as it pertains to the five cultural aspects that, according to our analysis, are most relevant to an understanding of Middle Eastern crowd behavior. In addition, we will suggest avenues for future research.

Goals and Motivation of Crowd Members

Cultural variation in individuals' goals, values, and needs has been the subject of extensive research (Schwartz, 1994). For example, Grouzet et al. (2005) found that personal goals in 15 countries comprised 11 categories falling along two dimensions:

1. Intrinsic goals (psychological needs) versus extrinsic (external rewards and praise) goals
2. Self-transcendent (spiritual needs) versus physical (pleasure and safety) goals

This two-dimensional model provides a theoretical framework that may prove useful for representing and describing differences in goal structures across cultures. Similarly, research on crowd types has provided frameworks for characterizing

crowds on the basis of members' goals and intentions, such as crowds who are expressive, acquisitive, escapist, and aggressive (Varwell, 1978). However, these frameworks do not explicitly include some of the goals, such as a "need for information," that the cultural experts in the current study identified as motivating crowd members' behavior. This finding suggests that further research should be conducted on the nature of goals within crowd situations.

Goal Commitment and Tolerance for Risk

Studies of cross-cultural differences in risk tolerance or risk-taking behaviors have primarily compared the United States and China. Far fewer studies address attitudes toward risk in Middle Eastern cultures, especially how risk attitudes prevalent in these cultures impact individuals' physical safety behaviors. This issue clearly would be most applicable to understanding risk-taking tendencies of crowds. A comparative study of traffic accidents suggests greater risk taking in the Middle East (Bener & Crundall, 2005). Bener and Crundall reported a significantly higher accident rate in Arab countries than in other developing countries with similar vehicle ownership levels. The largest single cause of accidents in the United Arab Emirates was careless driving, followed by excessive speed, both of which might be classified as high-risk-taking behaviors. These results suggest that Western and Middle Eastern cultural variations in tolerance for physical risks would be a fruitful area for further investigation.

Security Force Presentation With Respect to Cultural Norms

Although norms involve a large class of cultural phenomena, one cultural norm salient to the cultural experts in the current study was respect. Respect is a key concern in Middle Eastern cultures. How one appears to others, and how that image reflects on one's family, is an important determinant of individuals' perceptions and behavior. One's honor, or "face," is an important measure of a person's worth (Feghali, 1997). This aspect of Arab culture has been studied fairly extensively (Gregg, 2005; Patai, 2002; Peristiany, 1966). For example, Sieck and colleagues have recently examined the role of honor in understanding crowd reactions in the Middle East (Sieck, Smith, Grome, Veinott, & Mueller, 2009b). However, further research is needed to explicate the cultural beliefs linking violence and respect (Nisbett & Cohen, 1996), perhaps with more emphasis on understanding concepts of subcultures in which violent reactions lead to loss of respect.

Polarizing Language and Emotional Expression

The use of polarizing language has been described as especially prominent within the Middle East (Patai, 2002). A recent study found that sampled Middle Eastern societies exhibited the highest levels of polarized judgment in a comparison of 47 nations (Minkov, 2009). Minkov (2009) further linked the results to the propensity for dialectal thinking, such that "societies whose members are more likely to have dialectal selves are also more likely to suppress expression of strongly formulated quality judgments that are likely to cause social polarization" (p. 241). These results are also reminiscent of basic research that has been conducted on cultural variations regarding overconfidence in probability judgments, that is, people's tendency to overestimate the extent to which their judgments are correct. Most cross-cultural research on this

issue has compared East Asian and U.S. populations (Yates, Lee, Sieck, Choi, & Price, 2002). The typical finding across studies using a variety of procedures and materials is that Chinese tend to express greater overconfidence than Americans, whereas Japanese tend to be the least overconfident (and leaning toward underconfidence). Yates and colleagues also related the overconfidence results to decisiveness, and found a direct relationship between the size of the overconfidence effect and participants' reasoning, in particular, the extent to which they expressed balanced views on available options (Yates et al., in press). Given the importance of polarizing language and its effects on crowd member decisions as revealed by the experts in the current study, further research is warranted to clarify the precise relationships between patterns of polarized thinking, language, and decision making in crowd situations.

Similarly, albeit limited, some ethnographic research suggests that Middle Easterners tend to show more emotional expressiveness than Westerners (Patai, 2002). Though a sizable literature base exists on emotional expressions across cultures, the majority of this work has been limited to the study of Western and East Asian cultures. These studies provide substantial evidence for the universality in physiological responses to emotions (Bond, 2005). Cultural differences tend to emerge with respect to subjective emotional experience and measures of expressive behavior, such as facial expressions. Research on culture in crowds should further examine the relationships between polarized language, emotional expression, and violent actions. The incident below, which is the continuation of the situation mentioned at the beginning of this chapter, provides a good illustration of this issue. As described, a team of Americans, Kuwaitis, and an Iraqi were about to enter a cemetery to extract DNA of missing Kuwaitis from Saddam's invasion of Kuwait.

As the crowd began to form, the American team leader wanted to let the Kuwaitis do their job, while the United States drew the crowd's attention. It's a sensitive issue for Kuwaitis to be in Iraq. It's commonly believed by Iraqis that the Kuwaitis paid the United States money to destroy Baghdad in revenge for the Iraqi destruction of Kuwait City. The conversation between the older man and American team leader began in a very cordial manner. Just discourse, there was no sign of trouble. But the situation escalated as outrageous statements were made by the grizzled man, about Kuwaitis and then Israel. The American leader attempted to counter the arguments, but without effect. The crowd started to become more heated and the old man would throw in comments as the situation escalated. The American leader felt that the situation was starting to become dangerous for his team. At this point, there wasn't necessarily anything that the American could do to de-escalate the situation, so he gathered up the Kuwaitis and left.

Practical Implications

Based on the findings from this study, we developed an education package for use by American personnel who may need to manage crowds in the Middle East. The educational package focuses on providing learners with the specific cultural knowledge that is needed to make sense of Middle Eastern behavior in crowd situations. The educational content is delivered on a Web-based platform, and is organized into five modules. In Modules 1 to 4, the user is first presented with discussions of a particular

AU: Please update.

topic, followed by brief exercises to reinforce the lessons. Module 5 contains a capstone exercise that incorporates lessons learned in the previous four modules. A description of each module follows.

Module 1 provides an overview of culture and crowd management. It addresses high-level concepts, such as an introduction to culture and cultural considerations in crowd situations. The cultural sensemaking approach to understanding crowd situations is discussed. In addition, the user is presented with a summary of the main elements of a crowd situation and crowd types. Module 2 teaches the user how an understanding of the culturally based goals of crowd members can lead to accurate predictions of their behavior as the situation unfolds. This section addresses a cultural theory of goal structures and its application to reading intent in Middle Eastern crowd situations. The impact of situational factors on crowd goals is also discussed. Module 3 focuses on cultural underpinnings of decision making in crowd situations. This section discusses cultural variations in decision making between U.S. and Middle Easterners with application to making sense of crowd situations. Topics include crowd member mental models, the framing of situations, attitudes toward violence and physical risk, and emotional reactions and expressions. Module 4 presents security force strategies for managing crowds in the Middle East. Teaching points include ways to avoid common norm violations, and other incidental actions that can inflame a situation, actions for diffusing tensions, as well as techniques for countering inflammatory or polarizing tactics by hostile crowd members. Module 5 contains a capstone exercise that uses a cognitively authentic scenario to test the user's comprehension of teaching points.

Beyond providing this specific educational package, our research led us to formulate a systematic approach to cultural training that seeks to provide learners with specific cultural knowledge needed in particular situations, as well as general strategies for improving their ability to learn from their cultural experiences. This cultural sensemaking training approach is not concerned with educating the participant about high-level general cultural differences (Hofstede, 2001), nor does it focus on teaching domain skills, such as crowd control skills. Instead, the purpose of cultural sensemaking training is to provide the necessary cultural knowledge and strategies that learners need to be more successful in intercultural interactions in any number of specific situations, such as crowd situations in the Middle East (Sieck et al., 2008).

In addition to implications for cultural education and training, our results also bear on issues of technology development for the purposes of supporting crowd management in other cultures. Currently, much progress in the development of nonlethal weapons has emphasized technologies that increase the capability to apply physical force against crowds without killing. One strategy that experts in the present study repeatedly mentioned was the importance of communicating with crowd members in order to understand and influence the crowd situation. This result suggests that more emphasis should be placed on the advancement of communication technologies in crowd control. For example, crowd organizers are finding ways to use cell phones and fourth-generation wireless technologies to orchestrate and manage crowd events, for instance, by communicating destinations and slogans, or by providing directions. An important area for future research and development is to determine how communication technologies

can be used by security forces to assess and shape crowd events in ways that promote positive social effects.

During modern military operations that emphasize the provision of humanitarian assistance, stability, and other support to local populations, it is common for personnel to encounter and attract crowds of local civilians. These crowds can quickly escalate into angry riots when they are not handled properly. But when managed correctly, crowd situations provide opportunities to make gains on “winning the peace” (Petraeus, 2006). The manner in which American personnel interact with crowd members influences the crowd members’ beliefs about and attitudes toward the United States and its mission. This chapter aimed to provide an understanding of how cultural experts make sense of crowds and crowd behavior in the Middle East, with a special emphasis on the cultural issues that arise in crowd situations. It is hoped that the results and recommendations provided here will assist in improving American military interactions with culturally different civilians in such situations.

References

- Atran, S., Medin, D. L., & Ross, N. O. (2005). The cultural mind: Environmental decision making and cultural modeling within and across populations. *Psychological Review*, *112*(4), 744–776.
- Bener, A., & Crundall, D. (2005). Road traffic accidents in the United Arab Emirates compared to Western countries. *Advances in Transportation Studies, Section A*, *6*, 5–12.
- Bond, M. (2005). Emotions and their expression in Chinese culture. *Journal of Nonverbal Behavior*, *17*(4), 245–262.
- Bostrom, A., Fischhoff, B., & Morgan, M. G. (1992). Characterizing mental models of hazardous processes: A methodology and an application to radon. *Journal of Social Issues*, *48*(4), 85–100.
- Chi, M. T. H., Feltovich, P. J., & Glaser, R. (1981). Categorization and representation of physics problems by experts and novices. *Cognitive Science*, *5*, 121–152.
- Christensen-Szalanski, J. J. J., & Bushyhead, J. B. (1981). Physicians’ use of probabilistic information in a real clinical setting. *Journal of Experimental Psychology: Human Perception and Performance*, *7*(4), 928–935.
- D’Andrade, R. G. (1981). The cultural part of cognition. *Cognitive Science*, *5*, 179–195.
- Drury, J., & Reicher, S. (1999). The intergroup dynamics of collective empowerment: Substantiating the social identity model of crowd behavior. *Group Processes & Intergroup Relations*, *2*, 381–402.
- Drury, J., & Reicher, S. (2000). Collective action and psychological change: The emergence of new social identities. *British Journal of Social Psychology*, *39*, 579–604.
- Feghali, E. (1997). Arab cultural communication patterns. *International Journal of Intercultural Relations*, *21*(3), 345–378.
- Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin*, *51*, 327–358.
- Gopnik, A., & Wellman, H. M. (1994). The theory theory. In L. Hirschfeld & S. Gelman (Eds.), *Mapping the mind: Domain specificity in cognition and culture* (pp. 257–293). New York, NY: Cambridge University Press.
- Gregg, G. S. (2005). *The Middle East: A cultural psychology*. New York, NY: Oxford University Press.

- Grouzet, F. M. E., Kasser, T., Ahuvia, A., Dols, J. M. F., Kim, Y., Lau, S., ... Sheldon, K. M. (2005). The structure of goal contents across 15 cultures. *Journal of Personality and Social Psychology*, 89(5), 800–816.
- Hirschfeld, L., & Gelman, S. (Eds.). (1994). *Mapping the mind: Domain specificity in cognition and culture*. New York, NY: Cambridge University.
- Hoffman, R. R., Crandall, B. W., & Shadbolt, N. R. (1998). Use of the critical decision method to elicit expert knowledge: A case study in cognitive task analysis methodology. *Human Factors*, 40(2), 254–276.
- Hofstede, G. (2001). *Culture's consequences* (2nd ed.). Thousand Oaks, CA: Sage.
- Howard, R. A. (1989). Knowledge maps. *Management Science*, 35, 903–922.
- Klein, G. (1998). *Sources of power: How people make decisions*. Cambridge, MA: MIT Press.
- Klein, G., Calderwood, R., & MacGregor, D. (1989). Critical decision method for eliciting knowledge. *IEEE Transactions on Systems, Man, and Cybernetics*, 19(3), 462–472.
- Klein, G., & Hoffman, R. R. (1993). Seeing the invisible: Perceptual-cognitive aspects of expertise. In M. Rabinowitz (Ed.), *Cognitive science foundations of instruction* (pp. 203–226). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Klein, G., Phillips, J. K., Rall, E. L., & Peluso, D. A. (2004). A data/frame theory of sensemaking. In R. R. Hoffman (Ed.), *Expertise out of context: Proceedings of the 6th International Conference on Naturalistic Decision Making*. Mahwah, NJ: Erlbaum.
- Larkin, J., McDermott, J., Simon, D. P., & Simon, H. A. (1980). Expert and novice performance in solving physics problems. *Science*, 208, 1335–1342.
- Le Bon, G. (1947). *The crowd: A study of the popular mind*. London, UK: Ernest Benn.
- Lillard, A. (1998). Ethnopsychologies: Cultural variations in theories of mind. *Psychological Bulletin*, 123, 3–32.
- Minkov, M. (2009). Nations with more dialectical selves exhibit lower polarization in life quality judgments and social opinions. *Cross-Cultural Research*, 43(3), 230–250.
- Nisbett, R., & Cohen, D. (1996). *Culture of honor: The psychology of violence in the south*. Boulder, CO: Westview Press.
- Osland, J. S., & Bird, A. (2000). Beyond sophisticated stereotyping: Cultural sensemaking in context. *Academy of Management Executive*, 14(1), 65–79.
- Patai, R. (2002). *The Arab mind*. Long Island, NY: Hatherleigh Press.
- Peristiany, J. G. (Ed.). (1966). *Honour and shame: The values of Mediterranean society*. Chicago, IL: University of Chicago Press.
- Petraeus, D. H. (2006). Learning counterinsurgency: Observations from soldiering in Iraq. *Military Review*, 14, 2–12.
- Rouse, W. B., & Morris, N. M. (1986). On looking into the black box: Prospects and limits in the search for mental models. *Psychological Bulletin*, 100, 349–363.
- Schwartz, S. H. (1994). Cultural dimensions of values: Towards an understanding of national differences. In U. Kim, H. C. Triandis, C. Kagitcibasi, S. C. Choi, & G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications* (pp. 85–119). Newbury Park, CA: Sage.
- Sieck, W. R., McHugh, A. P., & Smith, J. L. (2006). Use of cognitive field research methods to investigate cultural groups: The case of individual decision making in Middle Eastern crowds. In R. Sun & N. Miyake (Eds.), *Proceedings of the 28th Annual Conference of the Cognitive Science Society* (pp. 2164–2168).
- Sieck, W. R., Rasmussen, L. J., & Smart, P. (2009a). Cultural network analysis. In D. Verma (Ed.), *Network science for military coalition operations: Information extraction and interactions*. London, UK: IGI Global.
- Sieck, W. R., Smith, J., Grome, A. P., Veinott, E. S., & Mueller, S. T. (2009b). *Violent and peaceful crowd reactions in the Middle East: Cultural experiences and expectations*. Paper presented at the International Academy for Intercultural Research, Honolulu, HI.

- Sieck, W. R., Smith, J., & Rasmussen, L. J. (2008). *Expertise in making sense of cultural surprises*. Paper presented at the Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC), Orlando, FL.
- Sperber, D. (1985). Anthropology and psychology: Towards an epidemiology of representations. *Man*, 20, 73–89.
- Sperber, D., & Hirschfeld, L. (1999). Culture, cognition, and evolution. In R. A. Wilson & F. C. Keil (Eds.), *The MIT encyclopedia of the cognitive sciences* (pp. cxi–cxxxii). Cambridge, MA: MIT Press.
- Varwell, D. W. P. (1978). *Police and public*. Plymouth: MacDonald and Evans.
- Yates, J. F., Ji, L.-J., Oka, T., Lee, J.-W., Shinotsuka, H., & Sieck, W. R. (In press). Indecisiveness and thoroughness: Cultural variations in customs, values, and expectations. *Journal of Cross-Cultural Psychology*.
- Yates, J. F., Lee, J.-W., Sieck, W. R., Choi, I., & Price, P. C. (2002). Probability judgment across cultures. In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment* (pp. 271–291). Cambridge, UK: Cambridge University Press.

AU: Please provide state.

AU: Please update.

