Basic Questioning Strategies for Making Sense of a Surprise: The Roles of Training, Experience, and Expertise

Winston R. Sieck (sieck@decisionmaking.com)
Deborah A. Peluso (debbie@decisionmaking.com)
Jennifer Smith (jsmith@decisionmaking.com)
Danyele Harris-Thompson (dharris@decisionmaking.com)
Klein Associates Inc.
1750 Commerce Center Blvd. North, Fairborn, OH 45324 USA

Information operations (IO) specialists are like US political strategists in foreign lands, and they are concerned with affecting others' decision processes. In order to be effective, IO practitioners must be able to efficiently develop an understanding, frame or theory (i.e. "make sense") about how decisions are made in a particular locale. As in scientific reasoning, when IO specialists observe surprising events, they have an opportunity to dramatically improve their frames (cf. Dunbar, 1995). But to capitalize on such opportunities, they must acquire the skill to ask good questions; questions that admit to a basic lack of understanding or that specifically challenge their frames. In the current study, we ask, "What roles do training and field experience have in acquiring skills for questioning one's frames?"

Method

Participants (n=60) were either laypeople (L) with no military background, novices (N) who were trained in IO, or individuals who had training and IO field experience (F). Of the latter group, 4 were identified as IO "experts" (E) via peer nomination. Participants were presented with a 1-page scenario describing a real situation that had occurred in Kosovo, and that was obtained earlier from an IO expert by CTA elicitation. The synopsis was that buses with armed escorts were used to transport Serb college students to school from their family's enclaves. The regional commander made plans to reduce the escort due to costs. An IO campaign was conducted to convince the *students* that the buses would still be safe. However, once the escort was reduced, the vast majority of students quit riding the bus. This was quite a surprise to US personnel on the scene. The reason as eventually discovered was that, unlike in the US, the Serb *mothers* made the ride/no ride decision for the students. This reason was not disclosed to participants. Instead, they were asked to explain their understanding of the situation in a think-aloud procedure, as well as what they would want to know to inform their understanding.

Results

The protocols were coded for key kinds of inquiries participants made, in particular, inquiries that would lead directly to developing an accurate understanding of the scenario. The two key inquiry types are: "Why are the students not riding?" and "Is someone else influencing the student's decision?" The proportions of participants who asked each of these key decisions by experience level are presented in Table 1. As shown, participants with field experience were 3 to 4 times more likely to ask one of these critical questions than were those with no field experience (trained or not), $\chi^2(1) = 5.31$, $p = .02$ for the "why" question, and $\chi^2(1) = 5.31$, $p = .02$ for the "who" question. The results were not due to the experienced participants simply "knowing" the answer. Only 3 participants hypothesized the correct answer (coded liberally as "family decides" is the reason). Also, accuracy did not depend on field experience, $\chi^2(1) = 0.04$.

Table 1: Proportion who ask each question

	Experience Level			
Key Inquiries	L	N	F	E
"Why not ride?"	.10	.04	.23	.50
"Who decides?"	.05	.09	.23	.50

Discussion

Experienced IO practitioners were much more likely to question important aspects of their frames than laypeople and trained novices. At one level, the kinds of questions they asked were quite "basic," lacking the obvious technical sophistication that might often be assumed to be associated with experience and expertise. Nevertheless, these simple questions were exactly the kind needed to develop a useful frame on which to base decisions and actions, and are quite similar to questioning strategies of experienced scientists. Indeed, the current study represents an early step toward extension of work in scientific reasoning, situation assessment, judgment and other areas to a broader collective higher-order cognitive topic of "sensemaking" (Klein et al. 2004).

Acknowledgments

This research was supported by the Army Research Institute for the Behavioral and Social Sciences (Contract 1435-01-01-CT-3116).

References

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