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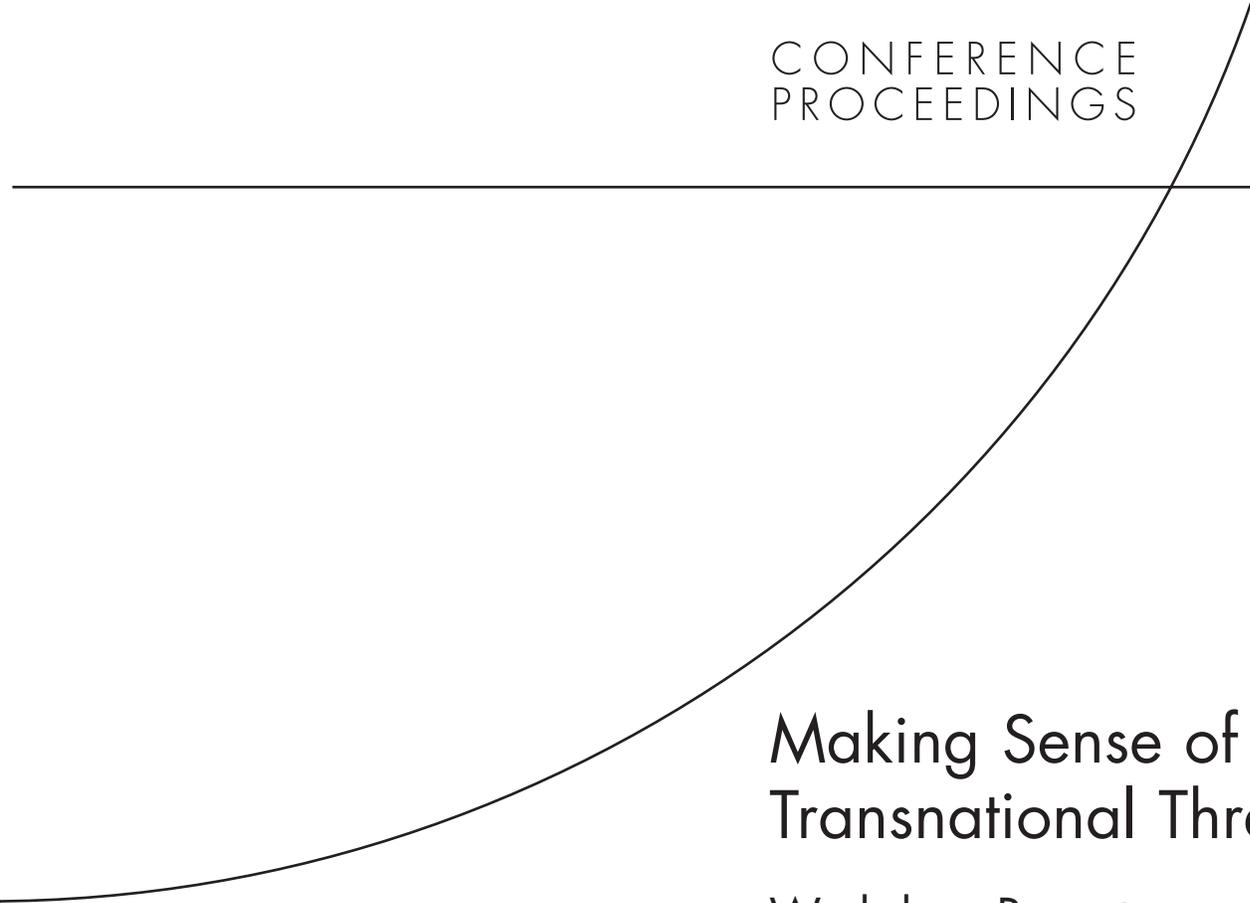
Making Sense of Transnational Threats

Workshop Reports

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The research described in this report was conducted by the RAND National Security Research Division (NSRD).

Summary

September 11 provided graphic testimony to the need to better "connect the dots" in providing warning of potential terrorist threats to the American homeland, and it also underscored the shift in intelligence's targets from states to non-state or transnational actors. These animating challenges were the focus of a series of four fascinating workshops conducted from February to September 2003 by Global Futures Partnership (GFP) in the CIA Directorate of Intelligence's Sherman Kent School for Intelligence Analysis and the RAND Corporation, a project that brought together a wide range of experts on cognition, culture, terrorism, and intelligence. This conference proceedings document contains the reports of the workshops, which are provocative in their own right. A fuller synthesis of the project's results, titled *Making Sense of Transnational Threats,* was published by the Kent School (Kent Center Occasional Paper, Vol. 3, No. 1).

September 11 was, in the words of foreign affairs columnist Thomas Friedman, a "failure of imagination." Many organizations, public and private, that confront uncertainty have developed processes and tools to try to avert such failures. For the Intelligence Community, one set of such tools has become known as "alternative analysis." If traditional intelligence analysis generates forecasts or explanations based on logical processing of available evidence, alternative analysis seeks to help analysts and policymakers to stretch their thinking and to hedge against the natural tendency of analysts – like all human beings – to search too narrowly for information that would confirm rather than discredit existing hypotheses, or to be unduly influenced by premature consensus within analytic groups close at hand.

In the Intelligence Community, alternative analysis has tended to be organized around discrete questions addressed in specific finished products. Thus, it is used only occasionally and then generally for less critical issues, such as long-run prospects for a country. It is often viewed by analysts as more of a supplemental exercise than an essential component of the overall analytic process; therefore, it is not particularly effective in influencing analytic judgments even when a serious effort is made to address a key issue.

The project's premise was that transnational issues do differ, as do targets of intelligence analysis, from more traditional state-centric issues. These differences are displayed in Table 1. To be sure, the differences are matters of degree. For instance, issues regarding weapons of mass destruction (WMD) mix states and non-states. And state-centric issues can share the defining characteristics of transnational issues – they are unbounded, fast moving, and obscured by overwhelming information. In that sense, the challenge facing analysts in comprehending Al Qaeda is not that much different from the ones confronting analysts in the run-up to the Battle of France or Pearl Harbor.

Table 1
Traditional Targets Versus Transnational Targets

Traditional Targets	Transnational Targets
Focus: states; non-states secondary	Focus: non-states; states as facilitators, willingly or not
Nature of targets: hierarchical	Nature of targets: networked
Context: intelligence and policy share basic "story" about states	Context: much less of a shared story about non-states, less "bounded," more outcomes possible
Information: there is too little information, and so priority goes to secrets	Information: secrets are still important, but there are torrents of information;; fragmented
Reliability: secrets regarded as reliable	Reliability: information unreliable
Pace of events: primary target slow moving, discontinuities rare	Pace of events: targets may move quickly, discontinuities all too possible
Interaction effects: limited	Interaction effects: "your" actions and observations have more effect on target's behavior

Intelligence issues are often divided between puzzles (which could be solved with information that is in principle, but perhaps not in fact, available) and mysteries (which are in the future and contingent, and thus cannot be solved through available information). Beyond these two categories, a third might be defined as "complexities." These are problems that can yield a very wide range of sui generis outcomes that defy even probabilistic predictions because of some combination of the following factors – large numbers of actors, perhaps each of small size; lack of formal or informal rules governing behavior; and the large influence of situational as opposed to internal factors in shaping behavior.

The four workshops explored a number of ways, especially more intuitive ways, to address such problems. One way that seemed especially promising was organizational "sense-making," as developed by the noted organization theorist, Karl Weick. Sense-making is a continuous, iterative, largely informal effort to paint a picture of what is going on that is relevant to an organization's goals and needs. This is accomplished by comparing new events to past patterns, or in the case of anomalies by developing stories to account for those anomalies. Organizations that must be highly reliable, such as aircraft carriers or nuclear power plants, face uncertainties that are akin to the uncertainties that the Intelligence Community faces. They develop what Weick calls "mindfulness" – in particular, a preoccupation with failure, both past and potential, and a "learning culture" in which it is safe and even valued for members of the organization to admit errors and raise doubts.

For intelligence, enhancing mindfulness would be a process, not a product. That process would be:

- **Continual**, not discrete or "one-off" efforts. The objective would be to regularly explore different possible outcomes and debate assumptions, all linked to incoming information on the issue under consideration.

- **Creative** and freewheeling, in place of a more formal alternative analysis process, with a strong emphasis on logical argument to come to clear conclusions. It would consciously mix mental biases – for instance, by using a method for building teams akin to the practice that some Wall Street firms use known as "barbelling," which

involves pairing young financial professionals with those over 50 to take advantage of both adventurousness and experience. And it would provide time, because ideas most often "pop out" of slow--moving, largely unconscious, contemplative modes of thought, rather than more conscious, purposeful, and analytic ones.

- **Collaborative**, instead of alternative analysis, such as playing devil's advocate or "what-if" analysis, that can be done individually. Indeed, sensemaking might be "public" – that is, orally reviewing assumptions and alternatives "out loud" as a collaborative effort.

- **Counter-intuitive**, seeking disconfirming evidence, rather than confirming evidence, and featuring regular, even if brief and informal, exercises in which analysts focus on how they could be wrong.

- **Consumer-friendly**, which is an enormous challenge since "alternative" anything implies yet more time demands on the part of consumers of intelligence of information. It requires thinking of new intelligence "products," for instance, Rapi-Sims, increasingly sophisticated spreadsheet-based programs that allow consumers to manipulate variables to generate alternative outcomes.

The key ideas for do-able innovations to enhance mindfulness are summarized in Table 2.

Table 2
Ideas and Implementation

Idea	Implementation and Purpose
Employ "analytic methodologists"	Design and facilitate divergent-thinking exercises and structured dialogues aimed at uncovering alternative views
Introduce public sense-making processes	Structured dialogues to consider all possibilities
Use web-logs as a production vehicle	Common, continuous platform for analysis/sense-making and for alternative processes
Consciously mix biases in teams (e.g., "barbelling")	Increase likelihood of alternative interpretations of evidence
Regularly do after-action reports	Look at failures and successes with an eye to drawing constructive lessons
Develop information technology to store and automatically recover hypotheses and ideas	Aid analysts' memory and creative thinking
Provide Rapi-Sims and other opportunities for experiential learning by intelligence consumers	Brief simulations/games to help consumers comprehend range of uncertainty

Alternative analysis needs to be framed as ongoing organizational processes aimed at sustained mindfulness, rather than as just a set of tools that analysts are encouraged to employ. The alternative analysis processes would have to be made a high priority of senior intelligence managers, reinforced by changes in reward structures, production schedules, and staffing requirements to encourage the continued use of these processes. Above all, they require an organizational culture that values and trains for continuous, collective introspection--often difficult to achieve in high-demand, understaffed environments. Could

mindfulness-focused organizational processes really enhance warning of emerging transnational threats? No one can confidently answer that question in the affirmative, but reflecting on past surprises in "complex" situations suggests that even modest improvements in organizational processes could make a significant difference in preparedness. What if the concerns of the Phoenix FBI office about flight training before September 11 had not only been shared broadly within the government but also integrated into a mindfulness-focused inter-agency process featuring collaborative sense-making, web-log type forums, and computer-generated references to extant scenarios for crashing airplanes into prominent targets? Might those concerns have garnered far broader attention than they did?