Date: Fri, 11 Dec 2009 14:03:16 -0500
To: "Dr. Baruch Fischhoff - Chair, National Academy of Sciences Study on Social & Behavioral Science and Improving Intelligence for National Security" <baruch@cmu.edu>,
From: Lloyd Etheredge <lloyd.etheredge@policyscience.net>

Subject: The Premature Conclusions chapter

Dear Dr. Fischhoff and Colleagues:

The National Academy's Report on the application of social and behavioral science to improve intelligence for national security should include a thoughtful **Premature Conclusions** chapter. There has been insufficient funding by the federal government, and - with rare exceptions - I am skeptical that any conclusions can be relied upon.

It could be especially helpful to the DNI to explain this candid conclusion in the specialized fields of cognitive psychology and experimental studies of decision behavior that are prominent in the membership of your panel. This field has been incautiously and prematurely built on a foundation of experimental studies with US undergraduates. For example:

Hubris, cognitive psychology, and risk

I discussed the early warnings by Gergen and Sears [in memo 12, a reference copy is on the www.policyscience.net Website]. Let me also draw, for purposes of this discussion, upon the chapter by Incheol Choi, Jong An Choi, and Ara Norenzayan, "Culture and Decisions," in the Blackwell Handbook of Judgment and Decision Making (Derek Koehler and Nigel Harvey (Eds.), (Blackwell, 2004) that will be known to some of your members.

They discuss - and the DNI should be warned about - the wrong but "strong universalist assumption cognitive psychologists and decision scientists have long entertained asserting that cognitive process and cognitive content are independent of each other and that cognitive content . . . can vary with cultures but cognitive process must be the same across all human groups." However, a few [i.e., it is an underfunded field] researchers have discovered that there *are* remarkable cultural differences that may be relevant to the DNI's global responsibilities - for example, the differences that Nisbett and others have documented contrasting US subjects

with Chinese and Japanese subjects concerning over-confidence and risk. And - contrary to expectations, for example - the baseline psychology of Chinese subjects, when gambling, is sometimes to be even more over-confident than Americans. . . .

These are becoming complex issues in an under-funded field, about which there has been further research since the Blackwell Handbook, and about which your panel members will be more expert.

Also: A Cautionary Note about Caution

The National Academy might want to include a cautionary note about caution. As your committee knows, one of the key research questions is the relationship between realistic risk assessment and institutional success. The baseline research - at least at the time of the Blackwell volume - showed most human beings to be over-confident about their degree of knowledge. That is, if you ask them a series of factual knowledge questions - as has been asked of CIA analysts, among others - like "Which is larger, Greenland or Australia?" and their estimated probability that their answer is correct, there might be, on average, a 15%-20% over-confidence shift [greater than the US in some Asian cultures, but less in Japan, etc. Interestingly, some Asian cultures [undergraduates?] seem greatly to over-use the 100% confident self-assessment.]. But what are we to make of this human baseline, and scientific non-rationality, in the light of Darwin and evolutionary psychology?

In the physical sciences and engineering, there is a very useful, specialized, investment and commitment to realistic probability assessment. But - for most areas of human endeavor and the species as a whole - *a mean over-confidence baseline might be highly desirable*. It might produce a bias toward action and sustain motivation: research at the State Department has shown, for example, that many young FSO's vastly over-estimate the probability (given the size of their age cohort and the number of available slots) that they will become an Ambassador someday. Many over-confident startup companies may crash and burn, but the human race succeeds by getting a Microsoft and an Apple.

Moving Beyond "Better Analytic Tools" & "15% - 20% more cautious conclusions"

One scientific skill is to maximize rigor and minimize error in the analysis of data -and the Fischhoff Commission was asked to give its advice about data systems and analytic methods. But the best package of social science advice to increase

the intelligence of American foreign policy [i.e., which you *also* were asked to address, as I interpret your mandate] may *not* be better analytic tools for the DNI's current 10 to the 24th power databases or 15%-20% more cautious conclusions. The best National Academy of Sciences recommendation for intelligence might be a better balance with rapid-learning elements from the learning strategy of successful organizations like Wal-Mart: continual [over-confident, but for many ideas that cannot yet be evaluated as over-confident] low-cost experimentation combining new ideas and new data with a system for rapid learning.

Every manager is expected to have experiments underway - new products, placements, price-points - and **new**, strategically created, data are transmitted, overnight, from all stores worldwide.

Similarly (since so many literature-review conclusions will be premature), for the sixteen agencies within the DNI's $75 billion/year purview, this would be an important area - an inventory of low-cost, rapid-learning experiments and new data - for National Academy recommendations.

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