

Date: Thu, 04 Mar 2010 12:38:56 -0500  
To: "Dr. Baruch Fischhoff" <baruch@cmu.edu>  
From: Lloyd Etheredge <lloyd.etheredge@policyscience.net>

**Subject: Hierarchical Psychodrama Models and Regime Collapse:  
Fwd: PCAST recommendations for neuroscience and rapid  
learning**

Dear Dr. Fischhoff & Colleagues:

Earlier in these submissions (which I hope you have found useful) I suggested several points where leading edge neuroscience can clarify, for the US intelligence community, the important and powerful nonrational forces and mechanisms in political behavior that have both beneficial and dangerous effects. (For example, submission # 3 on 9/26/2009 concerning enemy images, effects of teenage Arab males in the Middle East, and the brain chemistry of the fight-flight response that might be altered by shifting from "fear and awe" to respect.)

If it is interested in long-term R&D in neuroscience databases and analysis, many further causal mechanisms and policy choices are likely to be clarified by rapid development of the new neurosciences paradigm. I am enclosed two discussions that I have submitted to President Obama's Council of Advisers on Science and Technology and an NSF committee that oversees the major investment in (US) voting and political participation models.

**Hierarchical Psychodrama Models**

For example, a critical forecasting challenge concerns the power of hierarchical/authoritarian regimes and the mechanisms/timing of their collapse. [Jervis's new book, Why Intelligence Fails, includes an examination of the failures to predict the fall of the Shah of Iran.]

We just do not have good models of strong (hierarchical) power relationships: The attitude/cognitive/rationalist traditions of survey research used for Western democratic polities and ordinary forms of political influence do not predict the strong backward linkages that can be observed (for example, for 2/3 of American adults) in the Milgram experiments of obedience. The neuroscience paradigm can identify the brain mechanisms, that probably are engaged via hierar-

chical images and the visual cortex, with links directly to deeper, inherited, nonrational mechanisms of submission that are being observed in primates. The appeal of charismatic leaders and arousal/motivational effects also can be mapped.

For US policy - to forecast (and sometimes to cause) regime change - there probably is a tipping point or switch mechanism involved in the brain that is activated by several pathways - the strong power effect of 2/3 obedience suddenly collapses. *Pace* the Converse/Verba traditions, it's non-linear. And even the Shah and his formidable intelligence services can be surprised.

LE

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