

THE HONEST BROKER

bridges vol. 13, April 2007 / Pielke's Perspective

by Roger Pielke



Roger A. Pielke, Jr.

When former US Vice President Al Gore testified before Congress last month he used an analogy to describe the challenge of climate change:

"If your baby has a fever, you go to the doctor. If the doctor says you need to intervene here, you don't say, "Well, I read a science fiction novel that told me it's not a problem." If the crib's on fire, you don't speculate that the baby is flame retardant. You take action".

With this example Al Gore was not only advocating a particular course of action on climate change, he was also describing the relationship between science (and expertise more generally) and decision making. In Mr. Gore's analogy, the baby's parents (i.e. "you") are largely irrelevant to the process of decision making, as the doctor's recommendation is accepted without question.

But anyone who has had to take their child to a doctor for a serious health problem or an injury knows that the interaction between patient, parent, and doctor can take a number of different forms. In my new book *The Honest Broker: Making Sense of Science in Policy and Politics* (Cambridge University Press), I seek to describe various ways that an expert (e.g., a doctor) can interact with a decision maker (e.g., a parent) in ways that lead to desirable outcomes (e.g., a healthy child). Experts have choices in how they relate to decision makers, and these choices have important effects on decisions but also the role of experts in society. Mr. Gore's metaphor provides a useful way to illustrate the four different roles for experts in decision making that are discussed in *The Honest Broker*.

The Pure Scientist - seeks to focus only on facts and has no interaction with the decision maker. The doctor might publish a study that shows that ibuprofen is an effective medicine to reduce fevers. That study would be available to you in the scientific literature.

The Science Arbiter - answers specific factual questions posed by the decision maker. You might ask the doctor what are the benefits and risks associated with ibuprofen versus acetaminophen as treatments for fever in children.

The Issue Advocate - seeks to reduce the scope of choice available to the decision maker. The doctor might hand you a packet of a medicine and say "give this to your child." The doctor could do this for many reasons.

The Honest Broker of Policy Options - seeks to expand, or at least clarify, the scope of choice available to the decision maker. In this instance the doctor might explain to you that a number of different treatments is available, from wait-and-see to taking different medicines, each with a range of possible consequences.

Scholars who study science and decision making have long appreciated that efforts to focus experts only on the facts, and to keep values at bay, are highly problematic in practice. As noted scholar Sheila Jasanoff has written: "The notion that scientific advisors can or do limit themselves to addressing purely scientific issues, in particular, seems fundamentally misconceived." How might this occur in practice?

Consider the Pure Scientist or Science Arbiter as described above. How would you view their advice if you learned that each had received \$50,000 last year from a large company that sells ibuprofen? Or if you learned that they were active members of a religious organization that promoted treating sick children without medicines? Or if you learned that their compensation was a function of the amount of drugs that they prescribe? Or perhaps the doctor was receiving small presents from an attractive drug industry representative who stopped by the doctor's office

once a week? There are countless ways in which extra-scientific factors can play a role in influencing expert advice. When such factors are present they can lead to stealth issue advocacy, which I define as efforts to reduce the scope of choice under the guise of focusing only on purely scientific or technical advice. Stealth issue advocacy has great potential for eating away at the legitimacy and authority of expert advice, and even a corruption of expert advice.

Then how does one decide what forms of advice make sense in what contexts? In *The Honest Broker* I argue that a healthy democratic system will benefit from the presence of all four types of advice but, depending on the particular context of a specific, some forms of advice may be more effective and legitimate than others. Specifically, I suggest that the roles of Pure Scientist and Science Arbiter make the most sense when values are broadly shared and scientific uncertainty is manageable (if not reducible). An expert would act as a Science Arbiter when seeking to provide guidance to a specific decision and as a Pure Scientist if no such guidance is given. In situations of values conflict or when scientific certainty is contested, that is to say most political issues, then the roles of Issue Advocate and Honest Broker of Policy Options are most appropriate. The choice between the two would depend on whether the expert wants to reduce or expand the available scope of choice.

So your child is sick and you take her to the doctor. How might the doctor best serve the parent's decisions about the child? The answer depends on the context.

- If you feel that you can gain the necessary expertise to make an informed decision, you might consult peer-reviewed medical journals (or a medical Web site) to understand treatment options for your child instead of directly interacting with a doctor.
- If you are well informed about your child's condition and there is time to act, you might engage in a back-and-forth exchange with the doctor, asking questions about the condition and the effects of different treatments.
- If your child is deathly ill and action is needed immediately, you might ask the doctor to make whatever decisions are deemed necessary to save your child's life, without including you in the decision making process.
- If there is a range of treatments available with different possible outcomes, you might ask the doctor to spell out the entire range of treatment options and their likely consequences to inform your decision.

The interaction between expert and decision maker can be complicated, and understanding the different forms of this relationship is the first step towards the effective governance of expertise. The central message of *The Honest Broker* is that we have choices in how experts relate to decision makers. These choices shape our ability to use expert advice well in particular situations, but also shape the legitimacy, authority, and sustainability of expertise itself. Whether we are taking our children to the doctor, or seeking to use military intelligence in a decision to go to war, or using science to inform climate policies, better decisions will be more likely if we pay attention to the role of expertise in decision making and the different forms that it can take.

[The Honest Broker: Making Sense of Science in Policy and Politics](#) ,
published by Cambridge University Press in April, 2007.

Roger Pielke, Jr. serves as director of the Center for Science and Technology Policy Research. He has been on the faculty of the University of Colorado since 2001 and is a professor in the Environmental Studies Program and a fellow of the Cooperative Institute for Research in the Environmental Sciences (CIRES).