Summary of remarks at Threats to the University, Humanities, and Science Conference, Cambridge University, July 20-22, 2011

Session on Miscommunication between scientists and policy makers as a threat to trust and accountability in science.

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(1) I found it telling that there were no government policy makers invited to attend the meeting. This reflects an attitude by scientists that “government is the problem”. In fact, a big part of the problem is that scientists misunderstand what the government wants from them. The biggest mistake teachers make is to assume that their students are interested in what they have to say. In this case, scientists simply assume the government is interested in whatever they have to say about whatever they are interested in. However, if they are to have an impact on policy, they need to understand what the interests of the policy makers are when making their case.

Some items I mentioned in this regard:

(a) there was discussion of the inherent enlightenment afforded by studies in the humanities. However, it is not the job of government to ensure enlightenment of its citizens. Rather government provides access to education, health, security etc. If one is interested in government support of the humanities, one should not assume entitlement in this regard, but one needs to point out the value of studies in the humanities in producing better and more productive citizens through critical thinking skills, ability to read intelligently and communicate

(b) It is true that scientists need to explain that their results often need to be qualified, and that there is uncertainty in any modeling, but again, scientists need to understand that often issues of relevance to policy makers are also not black and white. In particular:

(c) there is more nuance in politics than science. Other, non-scientific issues are important in decision making, and one should not minimize or demean the non-scientific factors that policy makers need to consider beyond the scientific facts of a case. For example, while climate change may be well-established scientifically, policy makers do need to consider economic and security issues that may mitigate against certain actions. Another example is nuclear power and waste storage, which may be safe in principle, but government has to nevertheless deal with public perceptions of risks when considering actions such as building storage facilities etc. Other issues I discussed included risk aversion, and the need to confront illogical but powerful religious and cultural baggage.

I also pointed out that scientists need to distinguish facts and knowledge from opinion. Often scientists conflate opinions with the advice. This is fine, but it is
important to be clear when one is doing this. Otherwise the policy makers will assume it is all opinion.

(2) I then went on to discuss other threats.
   (a) Money talks and internet obfuscates: I pointed out the effect that huge lobbying and marketing has on affecting perceptions. i.e. money spent by anti-climate change lobbyists vs the total budget of the IPCC..and its affect on changing the US population's perception of human-induced climate change. The Internet, while opening access to information, also provides no filter. Fringe ideas which before had no traction can become dominant paradigms on the internet.
   (b) Scientists have to learn to deal with lies: Science assume honesty to properly function. But in the public domain anti-science forces often distort evidence or fabricate it, and scientists have to learn to deal with advertising manipulation, and political rhetoric, and play that game when necessary.
   (c) Journalists: In reaching the public one often has to go through journalists, and they are often part of the problem. They are not comfortable with science, are trained to assume that there are always two sides to every story, and moreover the journalists interested in covering science are often not allowed to report on the political pages of newspapers. I gave examples of this from my own experience. Bottom line: one needs to understand the media in order to work with them effectively to inform public policy.