The Roles of Scientists in Policy and Politics

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When Science and Citizens Connect: Public Engagement on Genetically Modified Organisms

A Workshop of the Roundtable on Public Interfaces of the Life Sciences
January 15-16, 2015
National Academy of Sciences
2101 Constitution Avenue, NW, Room 120, Washington, DC
“By all means, people can say, for ethical reasons, for philosophical reasons, for economical reasons, for political reasons,

'I am not keen on that.'

But you cannot say it is dangerous, when it isn’t.”

Ann Glover 2013
http://www.sciencemag.org/content/339/6124/1144.full
"The CSA has a purely advisory function and no role in defining Commission policies. Therefore, her views do not necessarily represent the views of the Commission."

José Manuel Barroso -- president of the European Commission in 2013 -- in response to query from a member of the EU parliament as to whether he agreed with Glover’s comments on GMOs.
NGOs call for the EC CSA to be abolished

"To the media, the current CSA presented one-sided, partial opinions in the debate on the use of genetically modified organisms in agriculture, repeatedly claiming that there was a scientific consensus about their safety ... We hope that you as the incoming Commission President will decide not to nominate a chief scientific adviser and that instead the Commission will take its advice from a variety of independent, multi-disciplinary sources, with a focus on the public interest."

July 2014

Brussels, 22 July 2014
President Juncker junked the CSA (U-turn?)
All communication/engagement is political
Modes of science engagement

Bottom line:

• It is important to discuss roles and responsibilities when scientists engage with decision makers & the public.
• There are multiple possible roles.
• All are important.
• You can’t swim without getting wet.
• Institutions matter
Some Basic Definitions

- **Science** = the systematic pursuit of knowledge
- **Policy** = a decision
- **Politics** = bargaining, negotiation, compromise in pursuit of a desired end
- **Politicization of science** = the use of the systematic pursuit of knowledge as a means of bargaining, negotiating, and compromising in pursuit of a desired end
Where to have dinner tonight?
Four idealized modes of engagement
Stealth Issue Advocacy

VIEW OF SCIENCE IN SOCIETY

Linear Model

Stakeholder Model

VIEW OF DEMOCRACY

Interest group pluralism

Elite Conflict

Pure Scientist

Issue Advocate

Science Arbiter

Honest Broker of Policy Alternatives
Criteria for Assessing Roles – Context Matters!

Criteria for Determining the Roles of Science in Policy and Politics

Is the decision context characterized by both Values Consensus and Low Uncertainty?

yes

Connected to Policy?

yes

Science Arbiter

no

Pure Scientist

no

Issue Advocate

Reduce Scope of Choice?

yes

no

Honest Broker
Abortion politics

Lack of agreement on ends or means or
Unmanageable uncertainties
Tornado politics

Agreement on ends and/or means and
Manageable uncertainties
Tornado politics are unique

Increasing Uncertainties

Wicked Problems

Tame Problems

Conflicting values

- Economic Growth
- Climate Change
- Abortion Is Murder
- Choice
Ye Olde Deficit Model Exerts a Powerful Pull

Truth Speaks to Power
Public opinion is indirectly related to policy

Policy can encourage stealth advocacy

Preble’s Jumping Mouse: A Distinct Subspecies?
Politicians love science ...
Foster said that scientists should expect that the information that they bring to the political process, such as through testimony before congressional committees, will inevitably be "distorted" in the political process.

He then raised what he called "a difficult ethical question" -- if a scientist knows that their message will be distorted in the political process, to what degree should s/he predistort their message in hopes that what comes out the other end is a closer approximation to reality?

*February 2011, AAAS Panel on "Responsible Research Practices"*
# Partisanship – A feature or flaw?

## Partisan and Ideological Differences

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**Ideological self-rating**

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* Based on 2009 Pew Research surveys; N=10,630. Figures read down.
Modes of science engagement

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Thank you!

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- Weblog: http://rogerpielkejr.blogspot.com/

2007 2010 2010 2014