

Climate Science/ClimateGate/Society

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Over the 1940s to perhaps the 1970s Science and Society had a working pact, based on the proposition that science had evolved a process for probing nature that was objective and provided the basis for innovation and technology that was good for mankind.



Robert K. Merton
1910-2003

Sociology of Science:
Universalism, norms,
objectivity, peer review,
organized skepticism,
shared information.
[Puritanical origins](#)



Vannevar Bush
1890-1974

Basic Science leads to innovation, technology

[Pre-VP: Henry, Langley, Abbot, etc.](#)

The justice/regulatory system and science begin to interact and society; this leads to tension between the two world views.



Needs an answer **now**

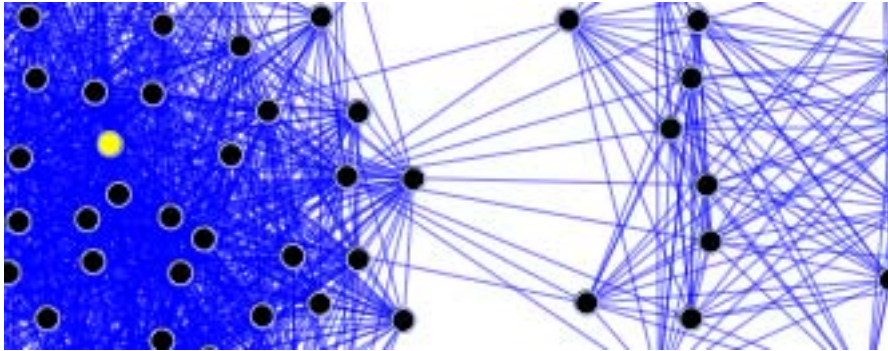


Ever tentative

Anti-Ballistic Missiles, Tobacco and Health, Pesticides, Acid Rain, Ozone Hole, Climate Change.

Merton's Sociology of Science led to Sociology of Scientific Knowledge (SSK), but postmodern thinking took it to an extreme.
Is it reality or just cultural?

A segment of a social network



Sociology of Scientific Knowledge: SSK



Climate Science in 2006 had matured due to the rapid growth in technologies especially ocean drilling, computers, satellites. It had settled into a paradigm that Thomas Kuhn might call “normal science”, plenty of puzzles to solve, no significant contradictions. Everybody’s busy, no contradictions or inconsistencies.



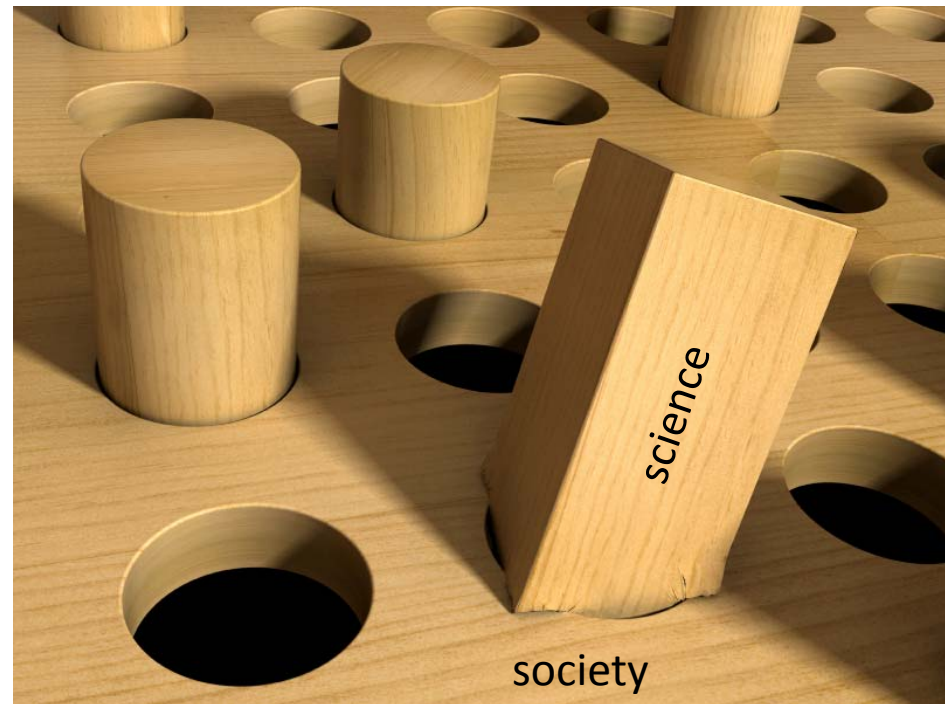
Thomas Kuhn
1922-1996

“TS Kuhn, dissociating himself from sociological appropriation of his work, has recently proclaimed that SSK, or, more ambiguously, what "has been widely understood" as its claims, is ‘an example of deconstruction gone Mad.’”

Quoted from S. Shapin, 1995: HERE AND EVERYWHERE: Sociology of Scientific Knowledge, Ann. Rev. Sociol, 21, 289-321.

1962: *The Structure of Scientific Revolutions*

“Despite much liberal educational rhetoric and distribution requirements, the gap between the ‘Two Cultures’ described by CP Snow in 1959 has not noticeably been bridged.” [Also from Shapin’s article.]



C. P. Snow
1905-1980
‘Two Cultures’

High Sticking

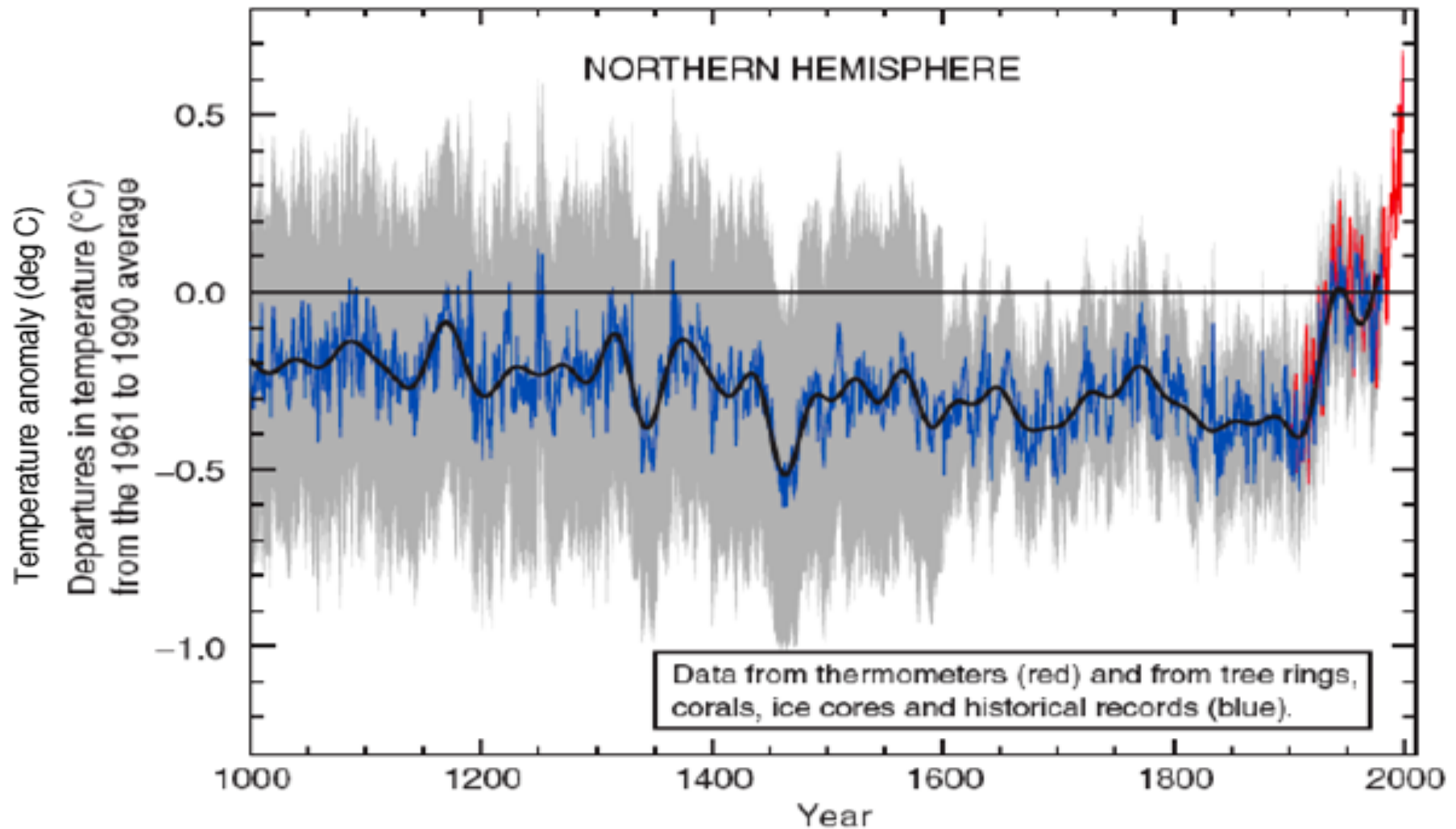


HOCKEY STICK DRAMA: 2006

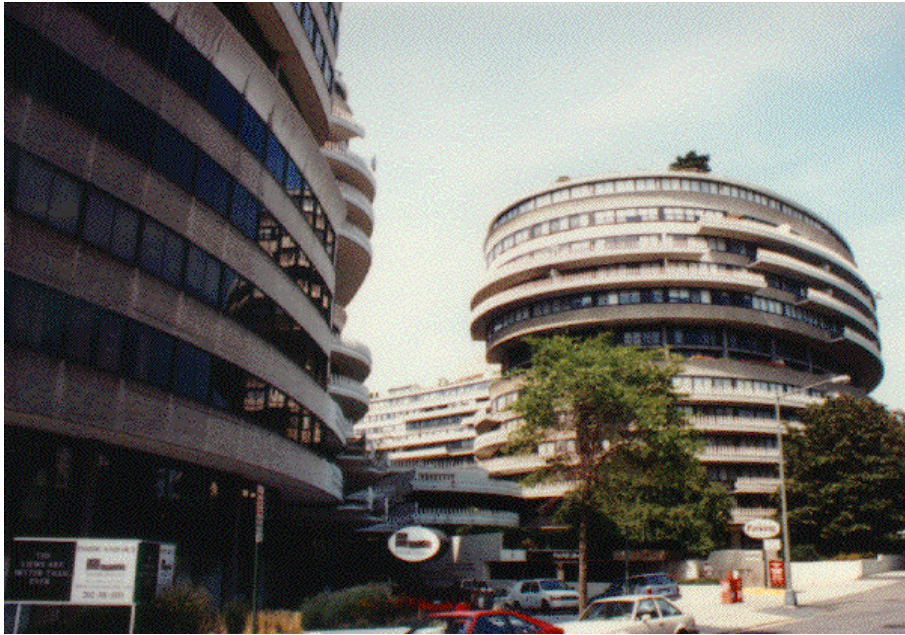
A battle between skeptic bloggers and climate scientists broke out in 2006 over papers written by Mann, Bradley and Hughes about temperature reconstructions. Congress got involved leading to an NRC Report and Hearings (largely supporting MBH).



Superimposing the MBH curve with the 2006 NRC Committee's curves



A word about NRC Committees. A word about IPCC.



WaterGate



High Crimes

ClimateGate!

In late 2009, thousands of emails were hacked from a server at University of East Anglia, going back a decade, providing plenty of grist for the blog mills (all just before Copenhagen). The affair was dubbed [ClimateGate](#) by fox news.

Google 'ClimateGate':

[Fox News Glenn Beck on Climategate | Watts Up With That?](#)

UPDATED: Better video quality in this copy on YouTube. Previous copy was low-res. Beck's summary of the CRU email exchanges is very strong. Transcript follows, thanks to ...

[wattsupwiththat.com/.../fox-news-glenn-beck-on-climategate](#) - [Cached](#)

[Why You Should Be Hot and Bothered About 'Climate-gate ...](#)

" -- This from the same **news** organization that regularly publishes classified ... may not be published, broadcast, rewritten, or redistributed. © 2010 **FOX News** ...

[www.foxnews.com/opinion/2009/11/24/john-lott-climate...](#) - [Cached](#)

[Fox News | CLIMATEGATE](#)

"Nutters" is English (and Schmidt is English) slang equivalent to "nut" in the sense of crazy person. Well, Schmidt should know—his boss is the director of GISS ...

[www.climategate.com/tag/fox-news](#) - [Cached](#)

[ClimateGate Totally Ignored By TV News Outlets Except Fox ...](#)

The Obama administration has another reason to hate **Fox**: it appears to be the only national television **news** outlet in America interested in the growing **ClimateGate** scandal

[newsbusters.org/blogs/noel-sheppard/2009/11/24/...](#) - [Cached](#)

['Climategate' - Fox News Video - FoxNews.com](#)

E-mails cast doubt on data behind global warming. Watch the latest politics, entertainment and breaking **news** videos at FoxNews.com.

[video.foxnews.com/v/3945613/climategate/?playlist_id=87249](#) - [Cached](#)

[Fox News coverage of Climategate | CO2 Realist](#)

Finally getting some decent coverage by the U.S. mainstream media, but only **Fox News** so far. Here's their latest articles: Facing Scandal, Head of Climate Research Lab ...

[co2realist.com/2009/12/01/fox-news-coverage-of-climategate](#) - [Cached](#)

[Climategate Controversy « FOX News Sunday](#)

Adding to the controversy over climate change — is **Climategate** — e-mails leaked or stolen

[fns.blogs.foxnews.com/2009/12/12/climategate-controversy](#) - [Cached](#)

Climate Science is suddenly a target for criticism.

**Glenn Beck Wants Climate Change Scientists To
Commit Hari-Kari, But Cites Global Knife Shortage As
Obstacle 02-12-10**



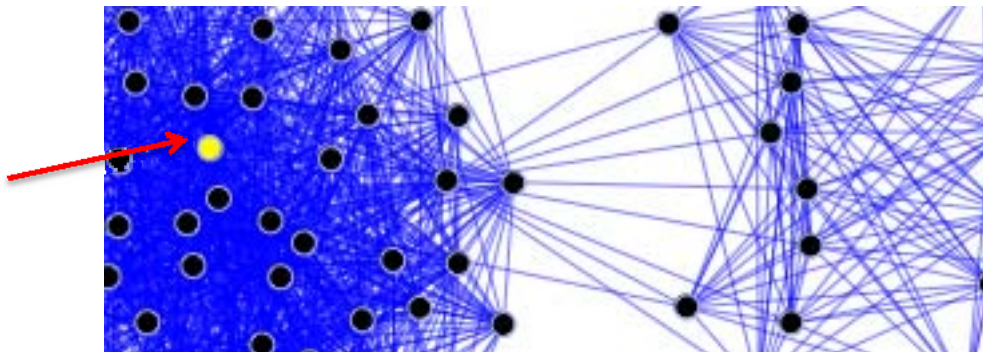
<http://www.casualguild.us/forums/tp-images/Image/glennbeck.jpg>

Climate science was not ready for the onslaught.

NO TRANSPARENCY NO CONSENSUS

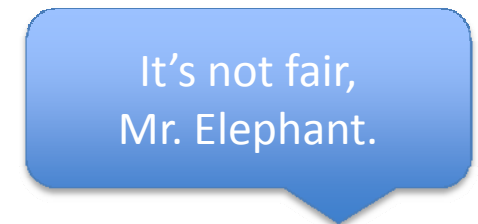


Michael
|
Mann?



A segment of a
social network

The asymmetry of the players, **bloggers and satirists** versus **scientists**, made for circus.



Professor Farnsworth

The Evil Bloggers

Science committee responds to Rep. Joe Barton

Sunday, October 17, 2010

Regarding [Rep. Joe Barton's Oct. 12 letter](#), "The right to question climate science":

I would like to correct some potential misunderstanding about the conclusions of the 2006 National Research Council report to which Mr. Barton referred. Quoting from the report's summary: "Based on the analyses presented in the original papers by Mann et al. and this newer supporting evidence, the committee finds it plausible that the Northern Hemisphere was warmer during the last few decades of the 20th century than during any comparable period over the preceding millennium."

While we did find some of the methods used in Michael E. Mann's original papers to be less cautious than some of our members might have used, we have not found any evidence that his results were incorrect or even out of line with other works published since his original papers.

Mr. Barton's reference to "[Mr. Mann's global warming projections](#)" is incorrect and quite misleading. Mr. Mann's work does not make projections about global warming. His work, and that of our committee, was concerned with the reconstruction of temperatures in the past. As stated in the report, this area of research does not attempt to make any inference about future temperatures. While knowledge of past climates fills in context, the arguments for anthropogenic global warming are mainly based upon the past 50 years of data, including temperatures, model simulations and numerous other indicators.

Gerald R. North, Bryan, Tex.

The writer was chair of the National Research Council's Committee on Reconstruction of Surface Temperatures for the Last 2000 Years, mandated by Congress. The views expressed are his own.

**The Hockey Stick
keeps on high- sticking
in October, 2010.**

The New York Times® Reprints

this week

October 20, 2010

Climate Change Doubt Is Tea Party Article of Faith

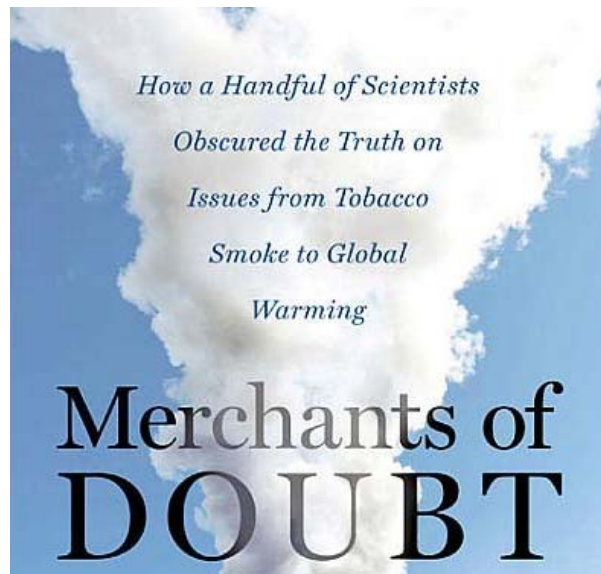
By JOHN M. BRODER

“Climate change is real, and man is causing it,” Mr. Hill said, echoing most climate scientists. “That is indisputable. And we have to do something about it.”

A rain of boos showered Mr. Hill, including a hearty growl from Norman Dennison, a 50-year-old electrician and founder of the Corydon Tea Party.

“It’s a flat-out lie,” Mr. Dennison said in an interview after the debate, adding that he had based his view on the preaching of [Rush Limbaugh](#) and the teaching of Scripture. “I read my Bible,” Mr. Dennison said. “He made this earth for us to utilize.”

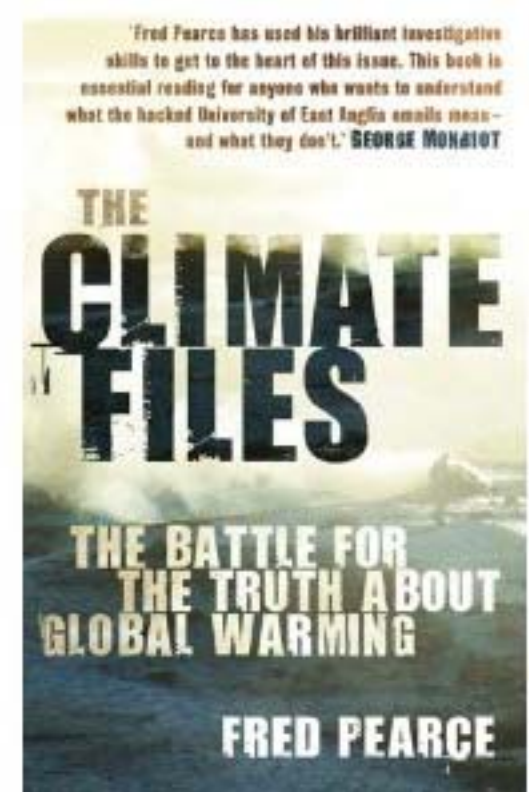
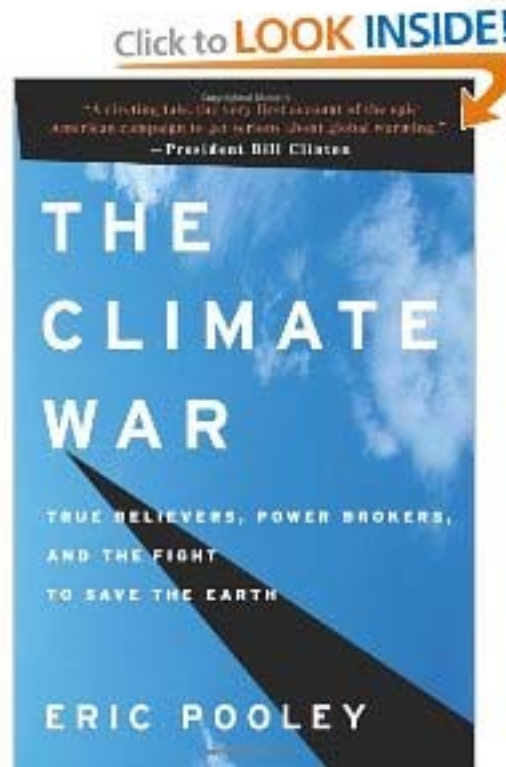
Interesting books are sprouting all over the place.



Naomi Oreskes & Erik Conway

Distorting Science While
Invoking Science. Debating
Science Shouldn't Enable
Anti-science Disinformation.

[All about Seitz, Jastrow,
Nirenberg, Singer, . . .]



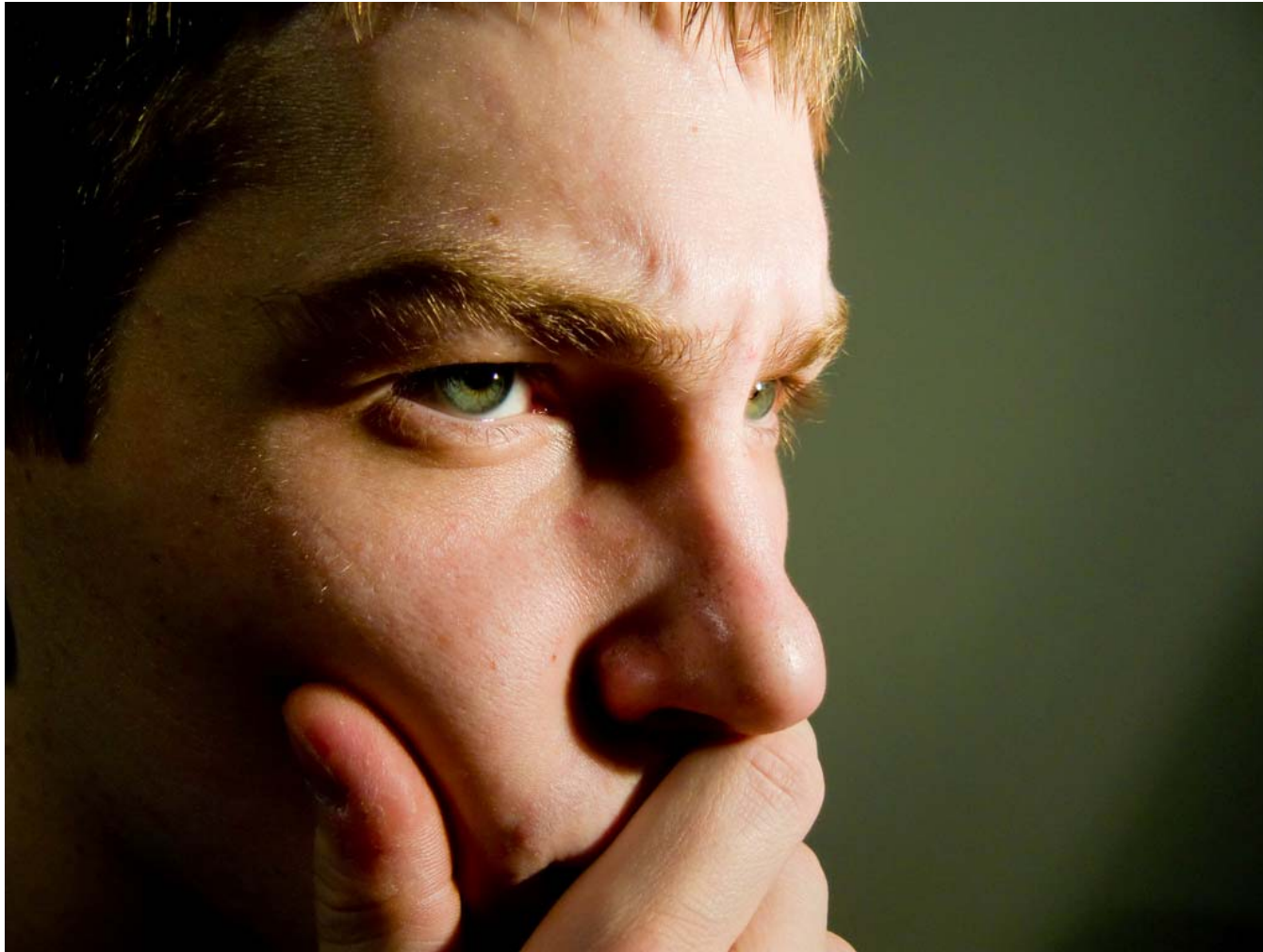
“Moron”

“Trying to
stay out of
prison ”



“Whore to the global warming crowd”

All the parties have been exonerated at least legally and no one has been fired; science moves on unaffected, but politicians continue to echo the old myths.



perplexed

SCIENCE AND SOCIETY

Testing Time for Climate Science

Sheila Jasanoff

*It is no longer enough to establish what counts as good science; it is equally important to address what science is good for and whom it benefits.

1. *The individual scientist or expert.*

peer review partly
serves this purpose, weeding out dishonesty
and misrepresentation along with mistaken or inconclusive results.

2. *Scientific knowledge.*

Reliable bodies of knowledge are built on theories and
methods that have wide currency among practitioners. Again,
peer review serves

3. *Committees that translate scientific findings
into policy-relevant forms.*

Their authority derives in part from individual members' impartiality and sound judgment. Scientific
advisory committees have dealt with the demand for accountability far longer than scientists who never
did the work of translating science for policy.



NRC vs. IPCC

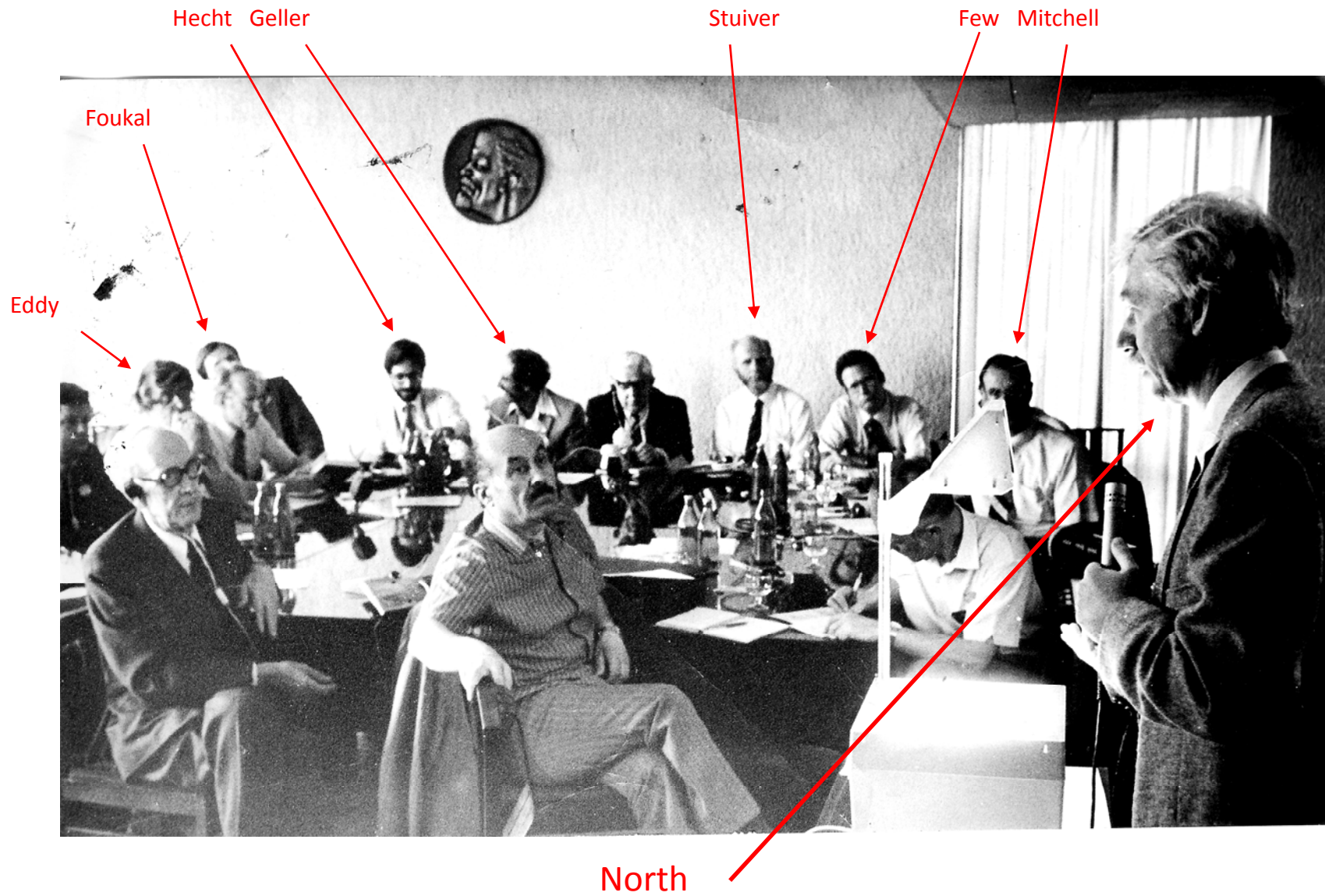
Lessons from all this

- Individuals must figure out how to deal with bloggers and satirists –the asymmetry problem. Decide when to drop it.
- How do we deal with complex scientific issues that have policy implications in a democratic society? NRC, and other interface committees.
- We need better policies and protocols on data management, especially for our more quaint subcultures. Institutionalize it: AGU to Agencies.

Is Anthropogenic Global Warming so?

- Yes, the evidence suggests it is to a very high degree of confidence. Just consider the last 50 years – data on forcings and responses.
- Should we as scientists be alarmed? Yes.
- How do we handle the role of advocate, yet remain the impartial objective scientist envisioned by sociologist Robert K. Merton?
- Winners/losers in a democratic society. Scientists or elected officials? Snow's two cultures problem.

Vilnius. Lithuania, *ca.* 1984



Ever trying to
bridge the
two cultures

Thanks, Jack!



Lithuania, *ca.* 1984