



EARTH IN THE BALANCE

Don't Believe the Hype

Al Gore is wrong. There's no "consensus" on global warming.

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According to Al Gore's new film "An Inconvenient Truth," we're in for "a planetary emergency": melting ice sheets, huge increases in sea levels, more and stronger hurricanes, and invasions of tropical disease, among other cataclysms--unless we change the way we live now.

Bill Clinton has become the latest evangelist for Mr. Gore's gospel, proclaiming that current weather events show that he and Mr. Gore were right about global warming, and we are all suffering the consequences of President Bush's obtuseness on the matter. And why not? Mr. Gore assures us that "the debate in the scientific community is over."

That statement, which Mr. Gore made in an interview with George Stephanopoulos on ABC, ought to have been followed by an asterisk. What exactly is this debate that Mr. Gore is referring to? Is there really a scientific community that is debating all these issues and then somehow agreeing in unison? Far from such a thing being over, it has never been clear to me what this "debate" actually is in the first place.

The media rarely help, of course. When Newsweek featured global warming in a 1988 issue, it was claimed that all scientists agreed. Periodically thereafter it was revealed that although there had been lingering doubts beforehand, *now* all scientists did indeed agree. Even Mr. Gore qualified his statement on ABC only a few minutes after he made it, clarifying things in an important way. When Mr. Stephanopoulos confronted Mr. Gore with the fact that the best estimates of rising sea levels are far less dire than he suggests in his movie, Mr. Gore defended his claims by noting that scientists "don't have any models that give them a high level of confidence" one way or the other and went on to claim--*in his defense*--that scientists "don't know. . . . They just don't know."

So, presumably, those scientists do not belong to the "consensus." Yet their research is forced, whether the evidence supports it or not, into Mr. Gore's preferred global-warming template--namely, shrill alarmism. To believe it requires that one ignore the truly inconvenient facts. To take the issue of rising sea levels, these include: that the Arctic was as warm or warmer in 1940; that icebergs have been known since time immemorial; that the evidence so far suggests that the Greenland ice sheet is actually growing on average. A likely result of all this is increased pressure pushing ice off the coastal perimeter of that country, which is depicted so ominously in Mr. Gore's movie. In the absence of factual context, these images are perhaps dire or alarming.

They are less so otherwise. Alpine glaciers have been retreating since the early 19th century, and were advancing for several centuries before that. Since about 1970, many of the glaciers have stopped retreating and some are now advancing again. And, frankly, we don't know why.

The other elements of the global-warming scare scenario are predicated on similar oversights. Malaria, claimed as a byproduct of warming, was once common in Michigan and Siberia and remains common in Siberia--mosquitoes don't require tropical warmth. Hurricanes, too, vary on multidecadal time scales; sea-surface temperature is likely to be an important factor. This temperature, itself, varies on multidecadal time scales. However, questions concerning the origin of the relevant sea-surface temperatures and the nature of trends in hurricane intensity are being hotly argued within the profession.

Even among those arguing, there is general agreement that we can't attribute any particular hurricane to global warming. To be sure, there is one exception, Greg Holland of the National Center for Atmospheric Research in Boulder, Colo., who argues that it must be global warming because he can't think of anything else. While arguments like these, based on lassitude, are becoming rather common in climate assessments, such claims, given the primitive state of weather and climate science, are hardly compelling.

A general characteristic of Mr. Gore's approach is to assiduously ignore the fact that the earth and its climate are dynamic; they are always changing even without any external forcing. To treat all change as something to fear is bad enough; to do so in order to exploit that fear is much worse. Regardless, these items are clearly not issues over which debate is ended--at least not in terms of the actual science.

A clearer claim as to what debate has ended is provided by the environmental journalist Gregg Easterbrook. He concludes that the scientific community now agrees that significant warming is occurring, and that there is clear evidence of human influences on the climate system. This is still a most peculiar claim. At some level, it has never been widely contested. Most of the climate community has agreed since 1988 that global mean temperatures have increased on the order of one degree Fahrenheit over the past century, having risen significantly from about 1919 to 1940, decreased between 1940 and the early '70s, increased again until the '90s, and remaining essentially flat since 1998.

There is also little disagreement that levels of carbon dioxide in the atmosphere have risen from about 280 parts per million by volume in the 19th century to about 387 ppmv today. Finally, there has been no question whatever that carbon dioxide is an infrared absorber (i.e., a greenhouse gas--albeit a minor one), and its increase should theoretically contribute to warming. Indeed, if all else were kept equal, the increase in carbon dioxide should have led to somewhat more warming than has been observed, assuming that the small observed increase was in fact due to increasing carbon dioxide rather than a natural fluctuation in the climate system. Although no cause for alarm rests on this issue, there has been an intense effort to claim that the theoretically expected contribution from additional carbon dioxide has actually been detected.

Given that we do not understand the natural internal variability of climate change, this task is currently impossible. Nevertheless there has been a persistent effort to suggest otherwise, and with surprising impact. Thus, although the conflicted state of the affair was accurately presented in the 1996 text of the Intergovernmental Panel on Climate Change, the infamous "summary for policy makers" reported ambiguously that "The balance of evidence suggests a discernible human influence on global climate." This sufficed as the smoking gun for Kyoto.

The next IPCC report again described the problems surrounding what has become known as the attribution issue: that is, to explain what mechanisms are responsible for observed changes in climate. Some deployed the lassitude argument--e.g., we can't think of an alternative--to support human attribution. But the "summary for policy makers" claimed in a manner largely unrelated to the actual text of the report that "In the light of new evidence

and taking into account the remaining uncertainties, most of the observed warming over the last 50 years is likely to have been due to the increase in greenhouse gas concentrations."

In a similar vein, the National Academy of Sciences issued a brief (15-page) report responding to questions from the White House. It again enumerated the difficulties with attribution, but again the report was preceded by a front end that ambiguously claimed that "The changes observed over the last several decades are likely mostly due to human activities, but we cannot rule out that some significant part of these changes is also a reflection of natural variability." This was sufficient for CNN's Michelle Mitchell to presciently declare that the report represented a "unanimous decision that global warming is real, is getting worse and is due to man. There is no wiggle room." Well, no.

More recently, a study in the journal *Science* by the social scientist Nancy Oreskes claimed that a search of the ISI Web of Knowledge Database for the years 1993 to 2003 under the key words "global climate change" produced 928 articles, all of whose abstracts supported what she referred to as the consensus view. A British social scientist, Benny Peiser, checked her procedure and found that only 913 of the 928 articles had abstracts at all, and that only 13 of the remaining 913 explicitly endorsed the so-called consensus view. Several actually opposed it.

Even more recently, the Climate Change Science Program, the Bush administration's coordinating agency for global-warming research, declared it had found "clear evidence of human influences on the climate system." This, for Mr. Easterbrook, meant: "Case closed." What exactly was this evidence? The models imply that greenhouse warming should impact atmospheric temperatures more than surface temperatures, and yet satellite data showed no warming in the atmosphere since 1979. The report showed that selective corrections to the atmospheric data could lead to some warming, thus reducing the conflict between observations and models descriptions of what greenhouse warming should look like. That, to me, means the case is still very much open.

So what, then, is one to make of this alleged debate? I would suggest at least three points.

First, nonscientists generally do not want to bother with understanding the science. Claims of consensus relieve policy types, environmental advocates and politicians of any need to do so. Such claims also serve to intimidate the public and even scientists--especially those outside the area of climate dynamics. Secondly, given that the question of human attribution largely cannot be resolved, its use in promoting visions of disaster constitutes nothing so much as a bait-and-switch scam. That is an inauspicious beginning to what Mr. Gore claims is not a political issue but a "moral" crusade.

Lastly, there is a clear attempt to establish truth not by scientific methods but by perpetual repetition. An earlier attempt at this was accompanied by tragedy. Perhaps Marx was right. This time around we may have farce--if we're lucky.

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