

Propaganda for human-caused global warming, courtesy the Royal Society and the BBC

“Science Under Attack”, aired on 24th January in the UK in BBC Two’s Horizon series, is a superb piece of propaganda masquerading as a scientific documentary. It seeks to quench any doubts that emissions of carbon dioxide are greatly speeding up global warming. A secondary aim seems to be to safeguard pronouncements from the scientific Establishment against criticism from outsiders.

Outside the UK, the program is not available from the BCC website, but it was on YouTube at <http://is.gd/EvfFSJ> (short for http://www.youtube.com/watch?v=V89AeCLCtJQ&feature=player_embedded).

The program is based on two presumptions, both of which are unsustainable: that a scientific consensus at any given moment should be taken as correct, and that computer models can accurately make predictions about something as complex as climate.

I call the program superb because it masks its propaganda so subtly and in so many ways. Perhaps first through being narrated by Sir Paul Nurse, president of the Royal Society, a disarmingly amiable person who has enjoyed thoroughly his lifelong work in science, along conventional lines but ably enough to bring a Nobel Prize. There is no trace of haughty arrogance in Nurse. When he says, “Call me Paul”, it is obviously meant wholeheartedly, it is a straightforward, genuine and unassuming meeting card as he begins conversations with people who question the conventional view on global warming, HIV/AIDS, or the safety of genetically modified plants and foods. I continue to find Nurse wholly likeable even as I find the program deviously misleading.

Second, “Science Under Attack” implies evenhandedness by allowing questioners to appear and to be treated in courteous, friendly fashion by Nurse.

Third, the very title of the program already makes its case subliminally. Surely science must actually be under attack if a program is devoted to the matter? Details might be arguable, say, the reasons why it is under attack, but surely the title couldn’t be entirely misleading, could it?

Fourth, a vast range of relevant matters are omitted or evaded. Perhaps the most important but least understood is that whenever the significance of science outside its own domain is concerned, namely, the consideration of potential applications of scientific knowledge, scientists (very much including Nobelists like Nurse) are not the experts, and indeed they are rarely knowledgeable at all; relevant here are the history of science, the philosophy of science, the sociology of science, matters about which most scientists are not only lamentably ignorant but often even misinformed. They are unaware that the history of science is a continuing story of consensus being found wrong and needing to be replaced. Most scientists --- and many others too --- still believe that scientists use a scientific method that automatically produces trustworthy results [1].

An important specific omission can be noted early in the program, when Nurse cites a letter published in *Science* in which 250 climate scientists deplore the manner in which they are accused, in intemperate language, of fudging their data. Those cry-babies have nothing to complain of by comparison with how they themselves treat their own peers who happen to take a different view, as when Bjørn Lomborg --- who doesn’t even question human-caused global warming, only the efficacy of Kyoto-type ameliorations --- was compared to a Holocaust denier in a book review published in *Nature*. Dissenters from the consensus are denied research funds, publication in leading journals, inclusion in conferences. The cry-babies had their letter published in *Science*, but letters from dissenters who have protested the lack of attention to the evidence they produce were refused publication in *Science* and *Nature* and the *Lancet* and the *New England Journal of Medicine* [2].

The program misleads by stating that the claimed attack on science comes from the lay public, vested ideological interests, and hapless media. In point of fact it is well qualified experts, insiders of the scientific specialty, who question the consensus; shunned by their own

professional forums, they can only turn to the public and the media in attempting to get some sort of hearing for their case.

The first flawed presumption on which the program rests is that a scientific consensus should be accepted at any given time. This is absurd on its face, especially in conjunction with the program's soothing assertion that the computer models are being improved all the time. Those two assertions amount to an intellectual oxymoron. There is no guarantee that the next "improvement" will not upset the whole apple cart; in this case --- to give just a couple of actual examples --- when it was found that the model was diametrically wrong about the influence of clouds, or when the previously unsuspected fact was discovered that living plants emit significant amounts of the powerful greenhouse gas methane. As Michael Crichton pointed out in a splendid essay [3], the same people whose computer models cannot predict weather with any certainty more than a few days ahead are asking that their computer models be trusted to tell us what's coming 50 and 100 years from now. Global temperatures have cycled over a range of about 5°C several times during the last million years. Until the computer models can simulate that record, which they presently cannot, there is no reason to pay any attention to what they predict about the future.

I suggest that when you hear "scientific consensus", you should immediately reach for your common sense and your history of science. Moreover, thousands of climate scientists and meteorologists are on record as disagreeing with the so-called consensus about climate change [4].

Crichton is also good about the second flawed presumption. Computer models can never be better than the assumptions and data fed into them. The only way to test them is to compare them with reality. No comparison based on current or past circumstances can ever validate a model, because the model was constructed through knowledge of those past and present circumstances, and the future might be different in some significant, unsuspected, unforeseeable way. In "Science Under Attack", Sir Paul expresses admiration for the NASA demonstration of how similar are the actual circumstances and those calculated by the computer; but of course the computer's calculations reflect accurately what is happening at the present time, because that's the knowledge that was programmed into it. Tomorrow may be another day entirely.

The NASA scientist admits that nature itself, rebounding from the last ice age, is causing some of the warming, but asserts that the present rate of warming is greater than anything in the past. That cannot be known. Past temperatures have fluctuated mightily: over a range of about 15°C several times during the billions of years of the Earth's existence; over a range of about 5-6 °C a dozen or two times during the last million years; but the data at hand are not fine-grained enough to enumerate all the fluctuations over periods as short as a century or so. We simply do not know how rapidly the global temperature rose or fell within any given century in the past. Furthermore, assessing changes --- let alone rapidity of changes --- of a continually fluctuating up-and-down temperature means choosing starting and ending points for calculating the change: start at the trough before a warming period and end at an apex, and the change looks large; start at an apex and end at the trough after a cooling period and the "change" will seem small or even in the opposite direction. The NASA man's assertion that warming is faster now cannot be known to be true, which makes it in effect a lie, albeit perhaps an unwitting one.

Sir Paul embodies superb propaganda not only because he is so sincere and affable but also because he symbolizes centuries of scientific achievement, emphasized several times in the program as he visits the Royal Society's archives and touches volumes by Darwin and Newton. Those lauded scientists were right, therefore we scientists are right now, is the obvious albeit somewhat subliminal message. There is no mention of Bernard Barber's long list of now-revered scientists, household names like Einstein (relativity) and Faraday (electrochemistry) and Lister (antisepsis) and Planck (quantum theory) who were fiercely resisted by their contemporary consensus [5]; nor were Newton's or Darwin's works received to immediate acclamation by all their contemporary peers.

George Bernard Shaw's insight ought to be recalled, that all professions are conspiracies against the laity: science has been a profession for more than a century now.

The program's appearance of evenhandedness is entirely misleading. Fred Singer is allowed to make a single point, that there's a strong correlation between the solar wind and Earth temperatures. Reflecting afterwards on that conversation, Sir Paul then points out that one must take into account *all* the evidence, not just a single factor, implying clearly enough that this is what Singer does. In reality, Singer takes into account every known factor no less than do the orthodox climate scientists, and some might say he considers all the data better than the orthodoxy does. A documentary that made Singer's case could be just as convincing, in the opposite direction, as this one is, if 95% of the program expounded Singer's views of "all" the evidence and if, "in fairness", one exponent of the orthodox view were allowed to make only a single point.

Similarly, Sir Paul talks with Tony Lance and allows him to mention that he has been "HIV-positive" for 13 years and entirely healthy and that he saw many friends dying after taking AZT. Later Sir Paul confesses that he doesn't understand Lance's thinking. Of course he doesn't, he didn't spend the requisite time learning about all the mainstream literature Lance has accumulated that supports his interpretation. Were Sir Paul to attempt to convey his own thinking to someone else in the space of a short conversation, that other person could well remain unable to understand Sir Paul's thinking.

It is also worth noting that Sir Paul Nurse is a biologist. On the matter of global warming, he takes on trust the purveyors of the orthodox view. This is standard practice within science: specialists in one field trust what they hear from specialists in other fields. But one can reasonably ask, why does Nurse trust the Establishment specialists rather than the at-least-equally qualified and eminent Fred Singer and the thousands of other well qualified specialists who maintain that human-caused global warming has not been proved?

A partial answer to that may be found in "The New World Order in Science" [6]: conflicts of interest within science and vested interests from outside science have distorted "the search for truth" to the degree that a contemporary "scientific consensus" reflects power rather than truth.

"Science Under Attack", then, is thoroughly wrongheaded and misleading, about matters large --- the nature of science, the significance of a scientific consensus, the role of computer models --- and about matters smaller, the specific evidence for and against human-caused global warming, HIV-caused AIDS, and the dangers of genetically modifying organisms. It is superbly convincing through the devices I've described. It is propaganda pure and simple, at its best --- which means at its moral worst.

It would therefore be gratifying to wax furious at Sir Paul Nurse and the writers and producers of this program for their devilish ingenuity and competence in manufacturing such an ingeniously successful piece of propaganda. But the reality is far worse than that. We should never attribute to malice what can be explained by incompetence, because incompetence or ignorance are really so much more common than deliberate malice. In more than one place, Sir Paul asserts that science is always trying to test its theories to self-destruction, always looking to *all* the evidence, always empirical and open-minded. He genuinely believes those things, not understanding that they are ideals and that scientists fall far short of practicing those ideals, individually to some extent but chiefly collectively, because science nowadays is a collection and a hierarchy of interlocking institutions that makes it enormously difficult to change any established consensus. This program was produced by perfectly well-intentioned true believers, whose ignorance is vast and also quite unsuspected by them. They don't know that they are cultish followers of the ideology of scientism, and they would be disbelieving, shocked, offended were that pointed out to them.

It is worth bearing in mind that the path to Hell is paved with good intentions.

- [1] Authoritative discussions of these issues by an informed science writer can be found in *Science, Money and Politics: Political Triumph and Ethical Erosion* (2001) and *Science for Sale: The Perils, Rewards, and Delusions of Campus Capitalism* (2007) by, Daniel S. Greenberg, both University of Chicago Press). As to the so-called scientific method, see Henry H. Bauer, *Scientific Literacy and the Myth of the Scientific Method*, University of Illinois Press, 1992.
- [2] See “Suppression of Science Within Science” at <http://is.gd/fU7Uh>.
- [3] Michael Crichton, “Aliens cause global warming (Caltech Michelin Lecture)”, 17 January 2003; <http://j.mp/GT1K>, accessed 18 June 2009.
- [4] <http://www.his.com/~sepp/>
- [5] Bernard Barber, “Resistance by scientists to scientific discovery.” *Science*, 134 (1961) 596-602.
- [6] <http://is.gd/fU88p>